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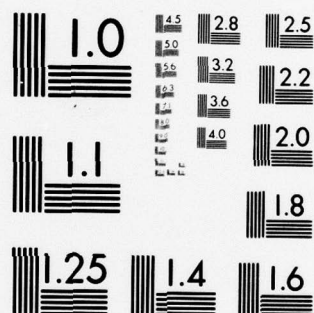
AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/9  
WEATHER CAREER LADDER, AFSC 251X0/A.(U)  
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9 OCCUPATIONAL SURVEY REPORT.



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6 WEATHER CAREER LADDER  
AFSC 251X0/A

AFPT 90-253-060

DECEMBER 1979

OCCUPATIONAL SURVEY BRANCH  
USAF OCCUPATIONAL MEASUREMENT CENTER  
RANDOLPH AFB TEXAS 78148

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## PREFACE

This report presents the results of a detailed Air Force Occupational Survey of the Weather career ladder (AFSCs 25130, 25150, 25150A, 25170, 25190, and CEM Code 25100). The project was directed by USAF Program Technical Training, Volume 2, dated October 1978. Authority for conducting occupational surveys is contained in AFR 35-2. Computer printouts from which this report was produced are available for use by operating and training officials.

The survey instrument used in the present project was developed by Second Lieutenant Andrew D. Mellors, Sr., Inventory Development Specialist. Captain James H. Gilbert and Second Lieutenant Gordon J. Curphy analyzed the survey data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Computer programs for analyzing the occupational data were designed by Dr. Raymond E. Christal, Manpower and Personnel Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Computer Programming Branch, Technical Services Division, AFHRL.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Survey Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

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## SUMMARY OF RESULTS

1. Survey Coverage: The Weather career ladder (AFSC 251X0/A) job inventory was administered worldwide to job incumbents in all commands. The 1,900 respondents in the survey represent 70 percent of the total assigned 251X0/A personnel.

2. Career Ladder Structure: An analysis of the specialty structure revealed seven clusters and eight independent job types. Most of the job groups contained either forecaster-qualified incumbents or weather observer personnel, but seldom did members of the two groups perform the same job. Two of the more specialized groups which contained both forecaster- and observer-qualified incumbents were Computer Programming and Processing Personnel and Rawinsonde Operators. Differences between the job groups were based on the level and function of the work unit, types of equipment used, and the time spent on management and supervisory tasks.

3. Career Ladder Progression: Three- and 5-skill level incumbents perform basically observer functions. DAFSC 25150A and 25170 personnel perform technical tasks related to forecasting. Although incumbents perform some supervisory tasks at the 7-skill level, AFSC 25190 personnel are the primary supervisors. Nine-skill level incumbents also fill the managerial positions of the specialty along with the Chief Enlisted Managers .

4. AFR 39-1: Overall, AFR 39-1 specialty descriptions provide a comprehensive overview of the Weather career ladder. However, coverage of the orientation and operation of Rawinsonde equipment in the 9-skill level specialty description should be considered for possible deletion.

5. Analysis of Training Documents: The Technical Training School (TTS) at Chanute AFB conducted a Weather utilization and training conference in November 1979 to revise the 251X0 STS. The results of the STS and POI ABR25130 analyses were provided to TTS and Air Weather Service personnel at the conference. Technical Training School personnel will receive new computer products following an analysis of the revised STS.

6. Comparison to Previous Survey: In comparing the 1972 Weather Forecaster survey to current survey data, a number of new and more specialized jobs emerged. Although this indicates a trend toward specialization, the basic nature of the forecaster specialty structure remains the same. A comparison was also made between the 1979 study and the 1970 Weather Observer survey. In contrast with the previous survey, there are very few observer personnel in the present study who perform supervisory tasks. Except for this difference, the jobs performed by weather observers in 1970 are similar to those performed by AFSC 25130 and 25150 personnel today.

7. Discussion: The Weather career ladder is basically a stable specialty which contains two distinct subgroups--observers and forecasters. However, the Air Force has effectively managed technological advancements in computer and communication systems during the 1970s by moving toward a more centralized system of weather forecasting. In addition, the survey data indicate possible problems for some groups concerning retention and effective utilization of training.

OCCUPATIONAL SURVEY REPORT  
WEATHER CAREER LADDER  
(AFSCs 25130, 25150, 25150A, 25170, 25190, AND  
CEM CODE 25100)

INTRODUCTION

The United States Air Force occupational survey program originated in 1956 when the Air Force Human Resources Laboratory developed the methodology for conducting occupational surveys. In 1967, Air Training Command established an occupational survey program which produced 12 enlisted career ladder surveys annually. The program was expanded in 1972 to produce surveys of 51 career ladders each year.

This report is an occupational survey of the Weather career ladder (AFSCs 251X0/A) completed by the Occupational Survey Branch, USAF Occupational Measurement Center, in December 1979. Air Weather Service (AWS) requested the present survey to obtain current job information on Weather career ladder incumbents. More specifically, AWS wanted to use the survey data to help assess the utilization and training requirements of weather personnel.

Background

The history of the Weather career field dates back to May 1951. From its inception until 1975, the career field consisted primarily of two separate ladders, Weather Forecasters (AFSC 253X0) and Weather Observers (AFSC 252X1). The observers were responsible for gathering weather data which forecaster personnel analyzed and used as the basis for their weather forecasts. The Forecasters formed a lateral career ladder with inputs from the Observer career ladder. In May 1975, a single career ladder was formed when the Weather Observer and Forecaster personnel merged into the AFSC 251X0 Weather career ladder. At that time, the 253X0 ladder was deleted, and the 252X1 ladder was projected to be deleted in 1981 due to attrition. In April 1976, the 25150A-shred DAFSC was added to identify E-4 graduates of the Forecaster course at Chanute AFB IL.

Currently, 251X0 personnel enter the career ladder by attending the basic Weather Observer course (3ABR25130) at Chanute AFB IL. The Forecaster course (3AAR25170) offered at Chanute is a prerequisite for upgrade to DAFSC 25170.

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The results of previous studies on weather personnel were published in separate Occupational Survey Reports (OSR) for the Weather Forecaster (AFSC 253X0) and Observer (AFSC 252X1) career ladders. The OSR for the Weather Forecaster career ladder (AFPT 90-253-960) was accomplished in April 1972, and the Weather Observer OSR (AFPT 90-252-012) was dated June 1970. Although the two reports presented descriptive job information for both ladders, the present study provides updated job information which reflects changes brought about by the merger of the two career ladders and by technological advancements.

This report contains information on the tasks performed by a worldwide sample of Weather personnel. The survey respondents provided data that can assist career field managers and trainers to more effectively manage and train Weather incumbents. Major areas discussed in this report include: (1) development and administration of the survey instrument; (2) the current job structure within the career ladder; (3) the relationship of skill level groupings to the specialty structure and to AFR 39-1 specialty descriptions; (4) CONUS and overseas differences; and (5) job satisfaction data.

## SURVEY METHODOLOGY

### Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory AFPT 90-253-060. The survey instruments from the 1972 Weather Forecaster (253X0) and 1970 Weather Observer (252X1) studies served as the basis for the new task inventory. The two previous task lists were updated and refined after thorough research of career field publications and directives and after personal interviews with 15 subject-matter specialists at five bases. The development process resulted in a task list consisting of 600 tasks grouped under 19 duty headings and a background section which included information about each respondent, such as grade, TAFMS, duty title, job interest, and the type of equipment worked on or used.

### Survey Administration

During the period May through September 1979, consolidated base personnel offices in operational units worldwide administered the inventory booklets to personnel holding Weather DAFSCs (251X0/A). The personnel were selected from a computer generated mailing list obtained from historical AFMPC personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL). Each individual who completed the inventory first completed an identification and a biographical information section, then checked each task performed in his or her current job.

After checking all tasks performed, each respondent then rated each of these tasks on a nine-point scale showing relative time spent on that task from one (very-small-amount time spent) through five (about-average-time spent) to nine (very-large-amount time spent). To determine relative time spent for each task checked by a respondent, all of the respondent's ratings were assumed to account for 100 percent of his or her time spent on the job. Task ratings were summed and then divided by the number of total task responses and the quotient multiplied by 100. This procedure provided a basis for comparing tasks not only in terms of percent members performing but also in terms of average percent time spent.

### Survey Sample

Personnel were selected to participate in this survey so as to insure proper representation across MAJCOM and paygrade groups. Ninety-eight percent of all weather personnel are assigned to the Military Airlift Command (MAC). Of the survey sample, respondents from MAC accounted for more than 93 percent of the total survey respondents. Table 1 indicates the paygrade distribution of the survey sample. The 1,900 respondents included in the final survey sample represent 70 percent of the 2,698 personnel assigned to the Weather career ladder. Overall, the survey sample provides a good representation of all segments of the career ladder.

TABLE 1

#### PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

<u>PAYGRADE</u>	<u>PERCENT OF ASSIGNED*</u>	<u>PERCENT OF SAMPLE</u>
AMN	18	17
E-4	32	33
E-5	25	24
E-6	13	14
E-7	9	9
E-8	2	2
E-9	1	1

\* MANNING FIGURES AS OF AUGUST 1979



The total active federal military service (TAFMS) survey distribution is presented in Table 2. Two of these AFMS groups are especially worth noting. The percentage of first term (1-48 month) respondents is lower than expected of most career ladders. It is not uncommon for a career ladder to have 50 percent or more of its incumbents in their first term. Therefore, the low percentage of 1-48 month airmen in the Weather career ladder indicates a high experience level among the incumbents. Another deviation from the expected survey distribution is the increase in the percentage of personnel in the 193-240 month AFMS group. Career ladder management personnel should be aware that there may be increased vacancies over the next three or four years if many of these senior forecaster personnel decide to separate at the 20 year point.

TABLE 2

AFMS DISTRIBUTION OF SURVEY SAMPLE

<u>AFMS (MONTHS)</u>	<u>PERCENT OF SAMPLE</u>
1-48	36
49-96	24
97-144	12
145-192	9
193-240	13
241+	6

Task Factor Administration

In addition to completing the job inventory, senior 251X0 personnel were also selected to complete a second booklet for either training emphasis or task difficulty. The 58 task difficulty and 51 training emphasis booklets completed by senior NCOs were processed separately from the job inventory. The uses of these task factor ratings will be discussed in detail within the Task Difficulty and Training Emphasis sections of this report.

## CAREER LADDER STRUCTURE

An essential part of the USAF Occupational Analysis program is the examination of tasks performed by career ladder incumbents to capture a picture of utilization and determine if the jobs performed are accurately reflected in official career ladder documents. The Comprehensive Occupational Data Analysis Programs (CODAP) provide a proven method to analyze the job structure of a career ladder. CODAP generates a hierarchical clustering of all jobs performed in the field based upon the similarity of tasks performed and the relative time spent on these tasks. Once the major job groups are identified for a career ladder, they are examined in terms of job description and background data to determine the particular characteristics of each group.

The basic identifying group used in the hierarchical job structuring process is the Job Type. A job type is a group of individuals who perform many of the same tasks and spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as a Cluster. In many career fields, there are specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled Independent Job Types.

The jobs performed by Weather career ladder incumbents are illustrated in Figure 1. Based on task and time similarity, seven clusters and eight independent job types were identified. The clusters, their respective job types, and the independent job types are listed on the following page.

The groups identified include 92 percent of the survey sample. The remaining eight percent do not group meaningfully because of their unique task responses. Examples of the job titles provided by the remaining eight percent of the respondents are: Product Management NCO, TAC Weather Training NCO, Wing Weather Specialist, Weather Observer Instructor, Quality Control NCO, Radar Weather Technician, Weather Map Plotter, Intelligence Branch Observer, Computer Flight Plan Monitor, Worldwide Applications Forecaster, Tropical Forecaster, Data Requirement Technician, and Library Clerk.

### Job Group Descriptions

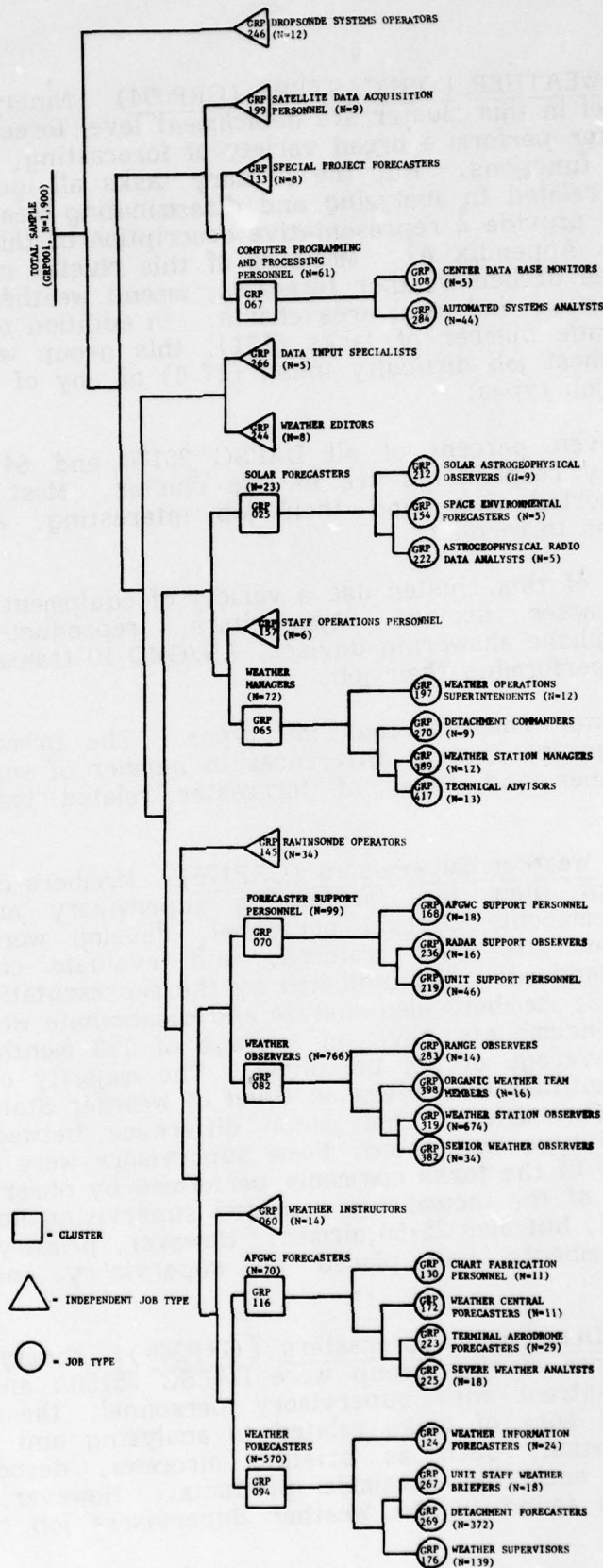
The following paragraphs contain brief job descriptions of the clusters, their representative job types, and the independent job types identified through the specialty structure analysis. Selected background information and "relative percent time spent on duties" data for the cluster and independent job type groups are presented in Tables 3 through 8. Appendix A contains the representative task lists for all of the job groups. Appendix B contains selected background data for the clusters and their respective job types.

251X0/A CAREER LADDER JOB GROUPS

- I. WEATHER FORECASTERS (GRP094, N=570)
  - a. Weather Supervisors (GRP176, N=139)
  - b. Detachment Forecasters (GRP269, N=372)
  - c. Unit Staff Weather Briefers (GRP267, N=18)
  - d. Weather Information Forecasters (GRP124, N=24)
- II. AIR FORCE GLOBAL WEATHER CENTRAL (AFGWC) FORECASTERS (GRP116, N=70)
  - a. Severe Weather Analysts (GRP225, N=18)
  - b. Terminal Aerodrome Forecasters (GRP223, N=29)
  - c. Weather Central Forecasters (GRP172, N=11)
  - d. Chart Fabrication Personnel (GRP130, N=11)
- III. WEATHER INSTRUCTORS (GRP060, N=14)
- IV. WEATHER OBSERVERS (GRP082, N=766)
  - a. Senior Weather Observers (GRP382, N=34)
  - b. Weather Station Observers (GRP319, N=674)
  - c. Organic Weather Team Members (GRP398, N=16)
  - d. Range Observers (GRP283, N=14)
- V. FORECASTER SUPPORT PERSONNEL (GRP070, N=99)
  - a. Unit Support Personnel (GRP219, N=46)
  - b. Radar Support Observers (GRP236, N=16)
  - c. AFGWC Support Personnel (GRP168, N=18)
- VI. RAWINSONDE OPERATORS (GRP145, N=34)
- VII. WEATHER MANAGERS (GRP065, N=72)
  - a. Technical Advisors (GRP417, N=13)
  - b. Weather Station Managers (GRP389, N=12)
  - c. Detachment Commanders (GRP270, N=9)
  - d. Weather Operations Superintendents (GRP197, N=12)
- VIII. STAFF OPERATIONS PERSONNEL (GRP157, N=6)
- IX. SOLAR FORECASTERS (GRP025, N=23)
  - a. Astrogeophysical Radio Data Analysts (GRP222, N=5)
  - b. Space Environmental Forecasters (GRP154, N=5)
  - c. Solar Astrogeophysical Observers (GRP212, N=9)
- X. WEATHER EDITORS (GRP244, N=8)
- XI. DATA INPUT SPECIALISTS (GRP266, N=5)
- XII. COMPUTER PROGRAMMING AND PROCESSING PERSONNEL (GRP067, N=61)
  - a. Automated Systems Analysts (GRP284, N=44)
  - b. Center Data Base Monitors (GRP108, N=5)
- XIII. SPECIAL PROJECT FORECASTERS (GRP133, N=8)
- XIV. SATELLITE DATA ACQUISITION PERSONNEL (GRP199, N=9)
- XV. DROPSONDE SYSTEMS OPERATORS (GRP246, N=12)



FIGURE 1  
CAREER LADDER STRUCTURE DIAGRAM  
(AFSC 2510/A)



I. WEATHER FORECASTERS (GRP094). Ninety-four percent of the personnel in this cluster are detachment level forecasters. Members in this cluster perform a broad variety of forecasting, observation, and supervisory functions. But the primary tasks all incumbents have in common are related to analyzing and disseminating weather information. Tasks which provide a representative description of this job cluster are presented in Appendix A1. Members of this cluster commonly perform tasks such as decode weather forecasts, amend weather forecasts, and analyze upper air and local area charts. In addition to performing the highest average number of tasks (131), this group was also rated to have the highest job difficulty index (17.4) of any of the clusters and independent job types.

Sixty-seven percent of all DAFSC 25170 and 64 percent of all 25150A survey respondents are in this cluster. Most incumbents (79 percent) reported they find their job interesting, and 60 percent indicated plans to reenlist.

Members of this cluster use a variety of equipment such as radar, metro-to-forecaster service, typewriters, reproduction equipment, automatic telephone answering devices, AN/GMQ 10 transmissometer, and ceilometer in performing their job.

The cluster contains four job types. The primary differences between the groups involve differences in number of supervisory tasks and the number and types of forecaster related tasks incumbents performed.

Ia. Weather Supervisors (GRP176). Members of this job type spend most of their time performing supervisory and forecasting functions. Incumbents counsel personnel, develop work methods or procedures, evaluate OJT trainees, and evaluate compliance with performance standards. As indicated by the representative tasks listed in Appendix A2, members also analyze and disseminate weather information. These incumbents have an average of 198 months TAFMS and supervise an average of six personnel. The majority of this group's membership identified themselves as Chief of Weather Station Operations or as Chief Forecaster. One minor difference between individuals within this job type was noted. Some supervisors were identified who performed many of the tasks commonly performed by observers. In this situation, most of the incumbents reported supervising not only DAFSC 25170 personnel, but also 25150 airmen. However, primary job emphasis for most incumbents was placed on supervisory and forecasting functions.

Ib. Detachment Forecasters (GRP269). Ninety-five percent of the incumbents of this group were DAFSC 25150A and 25170 personnel. In contrast with supervisory personnel, these forecasters perform a solid core of tasks related to analyzing and disseminating weather information, such as briefing aircrews, decoding weather forecasts, and analyzing facsimile products. However, differences similar to those found in the Weather Supervisors job type are also

found in this job type. Some of the Detachment Forecasters spend more time performing weather observer functions than others. Of these individuals performing the observer tasks, 56 percent reported they supervised DAFSC 25150 personnel. These noted differences did not alter the job description enough to identify a separate job type. Another difference between personnel within this job type involves the amount of time spent performing radar tasks. These differences appeared throughout the analysis of the Weather Forecasters and Observers clusters and appear to be a function of the particular units to which personnel were assigned.

Ic. Unit Staff Weather Briefers (GRP267). In addition to performing typical forecaster tasks, the 18 members of this group specialize in preparing and giving briefings. They provide weather support for special operations, prepare briefing charts, and brief nonweather personnel and commanders. Eighty-nine percent of these incumbents find their job interesting, and a high 78 percent indicated they plan to reenlist. Only two members indicated they used weather radar, and nine were stationed overseas.

Id. Weather Information Forecasters (GRP124). Members of this job type perform an average of only 42 tasks. Many of these tasks involve preparing weather forecasts and disseminating weather information. Incumbents spend much of their time briefing aircrews, amending or cancelling local weather warnings, preparing meteorological advisories, decoding weather forecasts, and completing weather briefing clearance forms. This group places less emphasis on analyzing weather information than the previous job types. Fifty percent of the incumbents found their job interesting, but only 25 percent indicated they intend to reenlist.

II. AIR FORCE GLOBAL WEATHER CENTRAL (AFGWC) FORECASTERS (GRP116). Members of this cluster spend the majority of their time analyzing weather data and preparing specialized weather forecasts and products. Ninety-six percent of the incumbents were either at AFGWC (76 percent) or at weather central (20 percent). The incumbents perform tasks such as locating meteorological features on charts, and analyzing upper air, vorticity, and synoptic surface charts. The personnel in this cluster are all qualified forecasters, and, as a group, perform an average of 40 tasks. Eighty-three percent of the cluster membership reported their job as interesting, and 57 percent of the incumbents indicated they intended to reenlist.

There are four job types within the cluster. These job types differ primarily in the specialized types of forecaster tasks each group performs.

Ila. Severe Weather Analysts (GRP225). Forecasters in this job type spend most of their time analyzing weather information and providing information on weather patterns, including weather system movement and intensity. They analyze weather information provided on upper air, vorticity, moisture, local area synoptic surface, radar, jet



stream, and stability charts. Only 39 percent of the incumbents reported issuing weather forecasts. Ninety-four percent of these personnel, who average 136 months TAFMS, feel their job is interesting, but only 33 percent said they would reenlist.

IIb. Terminal Aerodrome Forecasters (GRP223). Eighty-six percent of members of this group work at AFGWC. This group not only analyzes weather information but also prepares and issues forecasts. Some of their primary tasks include locating meteorological features on charts, issuing weather forecasts, and preparing centralized terminal forecasts. Some personnel also perform weather support for DOD units and special operations.

IIc. Weather Central Forecasters (GRP172). The tasks performed by the 11 members of this group involve analyzing weather data, issuing forecasts, and performing briefings. Like the first two job types in this cluster, this group spends considerable time analyzing charts and other weather information. But members also prepare briefings and transparencies to brief nonweather personnel and special mission personnel. Sixty-four percent of this group indicated they would reenlist.

IId. Chart Fabrication Personnel (GRP130). The personnel in this group are responsible for preparing master facsimile and cloud cover charts. They also analyze and produce facsimile products. In addition to performing these technical tasks, 73 percent of the incumbents indicated that they supervise weather specialists (AFSC 25150) and prepare APRs. Eighty-two percent of these AFGWC personnel consider their job interesting, while 73 percent indicated they plan to reenlist.

III. WEATHER INSTRUCTORS (GRP060). The 14 members of this independent job type are assigned to the Technical Training School at Chanute AFB. As expected, a major part of this group's time is spent preparing lesson plans, conducting classroom training, testing, and performing other tasks related to a formal training environment. (See Appendix A11 for a more complete listing of representative tasks).

Thirteen instructors indicated regular use of the weather radar unit. However, radar was the only weather equipment used by more than 50 percent of the instructors. At least 12 of the instructor personnel showed favorable responses to the four items which provide job satisfaction data. The percentage of members planning to reenlist (93 percent) was considerably higher than any other group identified in the specialty.

IV. WEATHER OBSERVERS (GRP082). Members of this cluster spend the majority of their time performing weather observing functions and servicing weather observing equipment. They determine information such as cloud layers to be considered a ceiling, prevailing visibility values, altimeter settings, and dew point. In addition, they

provide support for the forecasters by filing teletype messages, encoding messages, filing plotted maps or charts, and replacing teletype paper. Ninety-six percent of the personnel in the cluster are DAFSC 25150 (84 percent) and 25130 (12 percent) airmen. The average number of tasks performed by the group is 84.

Because of the nature of their job, incumbents in this cluster do not perceive their job as interesting as do personnel in the two forecaster clusters. Forty-one percent of the incumbents indicated they plan to reenlist. Common equipment used by 50 percent or more members of this group include weather radar, metro-to-forecaster services, teleautographs, AN/GMQ 10 transmissometer, and ceilometer. Eighty-eight percent of the personnel in this group work at a weather station.

The four job types identified within this cluster were differentiated by supervisory tasks and by the types of observer tasks incumbents perform.

IVa. Senior Weather Observers (GRP382). Members of this group perform not only those observer tasks characteristic of the cluster, but also perform supervisory and administrative tasks, such as maintaining station supplies or equipment, writing correspondence, instructing personnel on changes in methods or procedures, conducting OJT, and establishing organizational policies, office instructions, or standard operating procedures. Fifty-nine percent of the members reported they supervise weather specialists (AFSC 25130). Members of this group have an average of 81 months TAFMS (33 months more TAFMS than any other group in the cluster), and perform an average of 137 tasks (44 more than any other observer group).

IVb. Weather Station Observers (GRP319). Members of this group account for 88 percent of the total cluster. The tasks they perform are clearly typical of those performed by the cluster. As in the Detachment Forecaster job type, differences between incumbents occurred based on the availability of a radar unit.

IVc. Organic Weather Team Members (GRP398). Ninety-four percent of the personnel in this job type are stationed overseas. Incumbents spend the majority of their time determining weather information, but gather this information without the aid of weather equipment such as the AN/GMQ 10 transmissometer and ceilometer. Half of the group members reported using tactical weather equipment to gather weather information. In contrast with station observers, these personnel are not performing many of the support tasks, such as replacing barograph charts, annotating recording instrument charts, replacing wind recorder charts, or plotting skew T charts. Only 44 percent of the members rated their job interesting, and even fewer (25 percent) indicated they intend to reenlist.

IVd. Range Observers (GRP283). Members of this group determine upper air conditions using theodolite equipment and pilot balloons. Some key tasks include mounting and leveling theodolites,



assembling and testing pilot balloons, and determining type, character, and intensity of precipitation. Incumbents also provide support for bombing or gunnery ranges. Like members of the Organic Weather Team, personnel in this job type perform fewer support tasks. Of the 14 incumbents, 12 indicated their job was interesting, but only six showed intentions of reenlisting.

V. FORECASTER SUPPORT PERSONNEL (GRP070). As the title indicates, the 99 weather specialists in this cluster perform support functions for forecaster personnel. Members of this group typically perform tasks such as filing and posting charts, filing teletype messages, replacing teletype paper, and tearing maps from facsimile printers. Incumbents perform an average of 32 tasks. The 28 percent of the group membership rating their job as interesting is a much lower percentage than any other cluster or independent job type. Incumbents also did not perceive their job as effectively utilizing their talents (73 percent said little or not at all) or training (77 percent indicated little or not at all). Consequently, only 32 percent of the group plan to reenlist.

Three job types were identified in this cluster. Differences between the job types are a result of the type of equipment available or the particular function of the weather organization.

Va. Unit Support Personnel (GRP219). Members from this group work at combat control centers, command posts, and weather stations. Although incumbents perform a wide range of tasks, the most common items are clerical related tasks, such as replacing teletype paper, preparing automatic response query (ARQ) requests, making entries in observer logs, and filing charts, maps, and messages. Of the three job types in the cluster, the Unit Support Personnel had the lowest job satisfaction indicators with only 24 percent indicating they plan to reenlist.

Vb. Radar Support Observers (GRP236). In addition to performing the clerical tasks typical of the cluster, these personnel spend much of their time operating the weather radar. Incumbents maintain radar surveillance to determine information such as types of echoes and speed and direction of echo movement. In conjunction with the radar surveillance, 94 percent of these personnel reported using metro-to-forecaster service equipment.

Vc. AFGWC Support Personnel (GRP168). Ninety-four percent of the incumbents in this group work at AFGWC. Members of this heterogeneous group perform an average of only 15 tasks, and spend much of their time plotting weather information. Incumbents perform only a few common tasks, such as plotting activity charts and radar reports, filing charts, and replacing teletype paper. Within the Forecaster Support Personnel cluster, this job type had the highest percentage of personnel (44 percent) who indicate they plan to reenlist.

VI. RAWINSONDE OPERATORS (GRP145). Personnel in this independent job type spend a majority of their time operating rawinsonde equipment and taking upper air observations. They not only pre-flight, launch, and operate equipment but also encode radiosonde data and evaluate upper air data. Members of this job group work with a variety of equipment, such as computers, the AN/TMQ15 portable wind set, the ML594 launch cart, the UMQ-9 tracking unit, and tactical weather equipment (kit).

While 94 percent of the members reported working in rawinsonde operations, only 79 percent indicated they had attended the Technical Training School course for rawinsonde operators, course 3AZR25150-1.

Thirty-eight percent of the members belong to the Sixth Weather Squadron (mobile). Most of the group's membership is composed of DAFSC 25150 personnel (68 percent), with 76 percent of the incumbents in their first enlistment. Although 82 percent of the rawinsonde operators reported their job as interesting, only 32 percent indicated they plan to reenlist.

VII. WEATHER MANAGERS (GRP065). As expected, these incumbents spend a majority of their time performing managerial and supervisory functions. They perform very few technical functions. The most common tasks performed by this heterogeneous group include writing correspondence, evaluating compliance with performance standards, attending conferences or policy meetings, and interpreting policies, directives, or procedures for subordinates. Members of the group average 220 months TAFMS and perform an average of 66 tasks. The majority (82 percent) of group members indicated they find their job interesting, and 58 percent indicated they will reenlist.

VIIa. Technical Advisors (GRP417). Ten of the 13 members of this cluster are MAC technical advisors. As advisors, these incumbents place more emphasis on training functions than do the personnel of the other three job types. Writing correspondence, directing or implementing training programs, and directing compliance with operational directives are some of the representative tasks for this group.

VIIb. Weather Station Managers (GRP389). Although the members of this group perform a job similar to the Weather Supervisors (Cluster I), their top 75 tasks do not include any technical tasks. Ninety-two percent of the Weather Station Managers reported they supervise 5- and 7-skill level airmen. Tasks such as establish weather forecasting schedules, evaluate work schedules, prepare APRs, and assign on-the-job (OJT) trainers are a few of the descriptive tasks for this job type. Fifty percent of these 7- and 9-skill level incumbents are located outside the CONUS.

VIIc. Detachment Commanders (GRP270). In addition to managing personnel resources, as do incumbents of the previous job type, members of this group are also responsible for the physical and



financial resources of a unit. Their job involves determining requirements for space, personnel, equipment, or supplies, and evaluating budget or financial requirements. The senior NCOs of this group average over 14 months more TAFMS time than any other job group identified in the survey.

VIIId. Weather Operations Superintendents (GRP197). Although these individuals still perform some tasks related to personnel management, the emphasis of their job is on providing technical expertise and managerial support at the wing or squadron level. Their representative tasks include attending conferences or policy meetings, preparing inspection reports, and writing correspondence.

VIII. STAFF OPERATIONS PERSONNEL (GRP157). This group of senior NCOs perform an average of only 19 tasks. The personnel in this small group spend the majority of their time on tasks such as writing correspondence and special studies or reports, attending conferences or policy meetings, and drafting recommended changes to Air Weather Service (AWS) manuals. In contrast with the Weather Management Cluster, these individuals do very little direct management or supervision of personnel.

IX. SOLAR FORECASTERS (GRP025). Members of this heterogeneous cluster perform tasks involving the collection of solar data and preparation of special solar forecasts and reports. Because the members of this cluster perform such specialized jobs, only two tasks are performed by more than 50 percent of the members. Also, except for computers, the three job types within this cluster do not use similar equipment. Members of this cluster perform an average of 41 tasks. Ninety-six percent of the incumbents are forecaster qualified. As a group, 78 percent of the members rated their job as interesting, while 61 percent indicated they would reenlist. Although these satisfaction figures are fairly high, 65 percent of the members indicated their job does not effectively utilize their training.

IXa. Astrogeophysical Radio Data Analysts (GRP222). Incumbents in this specialized job type record and interpret data received from polarimeters, fixed frequency radiometers, short wave (SW) fade monitors, and swept frequency interferometers. They also prepare teletype reports, teletype tapes, and event warning reports. Eighty percent of the members find their job interesting and plan to reenlist. However, all of the members indicated their job utilizes their training little or not at all.

IXb. Space Environmental Forecaster (GRP154). Eighty percent of the personnel in this group work at AFGWC, specializing in preparing space environmental forecasts. They prepare a variety of forecasts and reports, such as seven-day AP forecasts, extended period forecasts, seven-day outlook forecasts, flare event warning reports, and X-ray event warning reports. Members of this group appear very satisfied with their job. All of the members said their job was interesting and indicated they would reenlist.

IXc. Solar Astrogeophysical Observers ( GRP212 ). This unique group of forecasters uses special optical procedures to acquire information about solar occurrences. Unlike the Astrogeophysical Radio Data Analysts who gather and interpret data, the Solar Astrogeophysical Observers do not appear to be interpreting the data they acquire. In gathering data, incumbents use various optical procedures, such as turn-on, flare occurrence, sun acquisition, and presunrise procedures. Personnel also operate camera equipment, tetrionic hard copiers, and spectrograph/spectroheliograph equipment. All of these personnel reported using the computer in their present job. Of the three job types in this cluster, this group had a much lower percentage of group members (33 percent) indicating they would reenlist.

X. WEATHER EDITORS (GRP244). Seven of the eight incumbents identified as weather editors are located overseas. Personnel in this group spend much of their job time manually editing weather messages. Representative tasks found in Appendix A32 include editing weather data from incoming circuits, reinserting routine delayed weather reports, relaying special data requests, and determining the authenticity of radio intercept stations. Of these eight DAFSC 25150 incumbents, five reported they direct the editing of weather reports.

XI. DATA INPUT SPECIALISTS (GRP266). The weather specialists in this independent job type work at AFGWC spending much of their time keypunching weather information on computer cards. While performing an average of only ten tasks, incumbents also use their time briefing relief observers, filing teletype messages, changing printer ribbons, and replacing teletype paper. As expected, most of these personnel (80 percent) said they use their weather training little or not at all in their job. In addition, only 40 percent indicated the job was interesting. Eighty percent reported they do not plan to reenlist.

XII. COMPUTER PROGRAMMING AND PROCESSING PERSONNEL (GRP067). Personnel in this cluster provide the support needed to furnish forecasters with computer weather information. Incumbents process weather data and write weather computer programs. Although the objective of the two job types identified in this cluster is to provide computer weather information, the two job types vary in the type of computer related tasks the incumbents perform. The tasks performed by 50 percent or more of the members in both groups include keypunching cards, inspecting condition of punch cards, building a data base, inventorying program tapes, and compiling summaries of output data. Personnel in the cluster operate card interpreters, card processors, and card punch equipment. Forty-three percent of the cluster indicated they plan to reenlist.

XIIa. Automated Systems Analysts (GRP284). Computer personnel in this cluster are predominately associated with AFGWC. These incumbents spend much of their time designing, writing, assembling, and documenting computer programs. They also process, compile, and correct computer data. Seventy-three percent of the incumbents work with the Univac 1108 computer. Of the 44 members in



this job type, 89 percent view their job as interesting. In contrast, 66 percent of the members indicated their job does not effectively utilize their training. Twenty-three percent of this group were DAFSC 25150 personnel.

XIIb. Center Data Base Monitors (GRP108). This group, which only performs an average of 24 tasks, specializes in maintaining computer weather information. Representative tasks include building a data base, compiling summaries of input and output data, and relaying special data requests. In addition, members write correspondence and attend conferences or policy meetings. Eighty percent of these incumbents are assigned to the Environmental Technology Applications Center (ETAC). Most members of this group reported their job utilizes their talents and training little or not at all (60 and 80 percent respectively).

XIII. SPECIAL PROJECT FORECASTERS (GRP133). The eight personnel in this independent job type work at AFGWC providing weather support for special operations and DOD units. In contrast to the personnel in the AFGWC Forecasters cluster, members not only forecast, but also perform a variety of computer and supervisory tasks. Group members perform an average of 66 tasks. They compile and process weather data which is used in computer programs. In addition, incumbents analyze weather data and issue weather forecasts. Equipment used by members of this group includes card interpreters, card processors, card punchers, and the Univac 1108 computer. Along with their other activities, 75 percent of the group reported supervising weather specialists. The fact that this job had a high job difficulty index (14.7) reflects the complexity of the job these incumbents perform.

XIV. SATELLITE DATA ACQUISITION PERSONNEL (GRP199). This unique group of AFGWC personnel performs an average of only 22 tasks. But the seven tasks in Appendix A38 which best describe this independent job type are all related to acquiring satellite information. Members of this special group spend a large percentage of their time operating satellite monitoring equipment, plotting satellite information, and cutting, numbering, and dating satellite pictures.

A review of the background data for this group revealed that incumbents perceived their training as not relevant to their present job. Eighty-nine percent of the Satellite Data Acquisition Personnel reported their job was interesting; but contrary to this figure, only 22 percent indicated they plan to reenlist. Eighty-nine percent of the members are still in their first-term.

XV. DROPSONDE SYSTEMS OPERATORS (GRP246). This exclusive group of 12 DAFSC A25150 personnel spend the majority of their time observing weather on the WC-130 reconnaissance aircraft. These weather specialists all gather weather information using dropsonde instruments. They preflight and postflight aircraft and dropsonde equipment, and use dropsonde data to compute and evaluate temperature, relative humidity, and altitude information. Like the Satellite

Data Processing personnel, most members of this group (83 percent) find their job interesting, but only 17 percent indicated they plan to reenlist.

### Summary

The specialty structure analysis of the Weather career ladder highlights the different roles weather observers and forecaster personnel perform. In general, the weather specialists gather various types of weather information and provide forecaster support. In contrast, the forecaster-qualified personnel analyze and disseminate weather data, and are the supervisors and managers of the career field. These differences are clearly evident not only in the two major job groups, the Weather Forecasters and Weather Observers clusters, but also in the more specialized jobs weather personnel perform. Very seldom were significant numbers of both the forecaster and observer personnel found performing the same job.

Also highlighted by the analysis was the variation of responses to the different job satisfaction indices by the various job groups. Some job groups, such as Rawinsonde Operators, Satellite Data Acquisition Personnel, Dropsonde Systems Operators, and Computer Programming and Processing Personnel indicated high job interest, but only small percentages of these groups plan to reenlist. Some of the reasons these incumbents gave for leaving the Air Force were pursue education, lack of promotion, and retirement. In contrast with these groups, other incumbents in job groups such as Data Input Specialists and Forecaster Support Personnel do not find their job particularly interesting, and indicated they will not reenlist. Still other personnel indicated their present job does not effectively utilize their training. Most of these individuals are in computer related jobs or specialized job groups involving solar forecasting and dropsonde systems operations.

TABLE 3  
SELECTED BACKGROUND DATA ON CAREER LADDER CLUSTER GROUPS

	WEATHER FORECASTERS	AFGWC FORECASTERS	WEATHER OBSERVERS	FORECASTER SUPPORT PERSONNEL	WEATHER MANAGERS	SOLAR FORECASTERS	COMPUTER PROGRAMMING/ PROCESSING PERSONNEL
NUMBER IN GROUP	570	70	766	99	72	23	61
PERCENT OF SAMPLE	30%	4%	40%	5%	4%	1%	3%
PERCENT LOCATED OVERSEAS	27%	11%	23%	26%	33%	44%	7%
DAFSC DISTRIBUTION							
25130	0%	0%	12%	7%	0%	0%	0%
25150	2%	0%	84%	93%	4%	4%	23%
25150A	8%	10%	1%	0%	0%	9%	8%
25170	79%	86%	1%	0%	43%	70%	61%
25190	10%	4%	0%	0%	35%	17%	8%
CEM CODE 25100	1%	0%	0%	0%	17%	0%	0%
NOT INDICATED	0%	0%	2%	0%	1%	0%	0%
AVERAGE GRADE	5.7	5.3	3.8	3.8	7.2	5.9	5.1
AVERAGE MONTHS IN CAREER FIELD	128	101	33	34	220	170	116
AVERAGE MONTHS IN SERVICE	158	133	50	44	233	177	129
PERCENT IN FIRST ENLISTMENT	2%	3%	65%	71%	0%	0%	26%
AVERAGE NUMBER SUPERVISED	2	0	0	1	4	1	0
AVERAGE NUMBER OF TASKS PERFORMED	131	40	84	32	66	41	34



TABLE 4

## SELECTED BACKGROUND DATA ON CAREER LADDER INDEPENDENT JOB TYPE GROUPS

	WEATHER INSTRUCTORS	RAVINSOONDE OPERATORS	STAFF OPERATIONS PERSONNEL	WEATHER EDITORS	DATA INPUT SPECIALISTS	SPECIAL PROJECT FORECASTERS	SATELLITE DATA ACQUISITION PERSONNEL	DROPSONDE SYSTEMS PERSONNEL
NUMBER IN GROUP	14	34	6	8	5	8	9	12
PERCENT OF SAMPLE	*	2%	*	*	*	*	*	*
PERCENT LOCATED OVERSEAS	0%	15%	0%	88%	0%	0%	0%	25%
DAFSC DISTRIBUTION								
25130	0%	6%	0%	0%	0%	0%	11%	0%
25150	7%	68%	0%	100%	100%	0%	78%	100%
25150A	0%	9%	0%	0%	0%	12%	0%	0%
25170	79%	15%	50%	0%	0%	50%	11%	0%
25190	14%	0%	17%	0%	0%	38%	0%	0%
CEM CODE 25100	0%	0%	33%	0%	0%	0%	0%	0%
NOT REPORTED	0%	2%	0%	0%	0%	0%	0%	0%
AVERAGE GRADE								
AVERAGE MONTHS IN CAREER FIELD	6.1	3.8	7.5	3.8	3.2	5.5	3.4	4.3
AVERAGE MONTHS IN SERVICE	172	46	242	47	24	116	27	55
PERCENT IN FIRST ENLISTMENT	177	51	255	48	30	153	55	58
	7%	76%	0%	75%	80%	0%	89%	33%
AVERAGE NUMBER SUPERVISED								
AVERAGE NUMBER OF TASKS PERFORMED	0	1	0	0	0	2	1	0
	45	74	19	24	10	66	22	21

\* LESS THAN ONE PERCENT



TABLE 5  
COMPARISON OF JOB SATISFACTION INDICES BY CAREER LADDER CLUSTER GROUPS  
(PERCENT MEMBERS RESPONDING)

	WEATHER FORECASTERS	AFGHC FORECASTERS	WEATHER OBSERVERS	FORECASTER SUPPORT PERSONNEL	WEATHER MANAGERS	SOLAR FORECASTERS	COMPUTER PROGRAMMING/ PROCESSING PERSONNEL
I FIND MY JOB:							
DULL	8	8	18	52	6	13	5
SO-SO	8	6	14	17	7	0	5
INTERESTING	79	83	65	28	82	78	85
NOT REPORTED	5	3	3	3	5	9	5
MY JOB UTILIZES MY TALENTS:							
LITTLE OR NOT AT ALL	12	14	29	73	14	26	15
FAIRLY WELL TO VERY WELL	67	69	64	23	55	52	51
EXCELLENTLY TO PERFECTLY	20	14	6	2	28	18	34
NOT REPORTED	1	3	1	2	3	4	0
MY JOB UTILIZES MY TRAINING:							
LITTLE OR NOT AT ALL	9	13	12	77	29	65	67
FAIRLY WELL TO VERY WELL	70	61	71	23	46	17	25
EXCELLENTLY TO PERFECTLY	19	23	15	0	22	13	8
NOT REPORTED	2	3	2	0	3	5	0
I PLAN TO REENLIST:							
NO OR PROBABLY NO	37	43	55	65	38	39	57
YES OR PROBABLY YES	60	57	41	32	58	61	43
NOT REPORTED	3	0	4	3	4	0	0

TABLE 6  
COMPARISON OF JOB SATISFACTION INDICES BY CAREER LADDER INDEPENDENT JOB TYPE GROUPS  
(PERCENT MEMBERS RESPONDING)

	WEATHER INSTRUCTORS	RAWINSONDE OPERATORS	STAFF OPERATIONS PERSONNEL	WEATHER EDITORS	DATA INPUT SPECIALISTS	SPECIAL PROJECT FORECASTERS	SATELLITE DATA ACQUISITION PERSONNEL	DROPSONDE SYSTEMS PERSONNEL
<u>I FIND MY JOB:</u>								
DULL	0	0	17	38	20	0	0	0
SO-SO	7	12	0	12	40	12	11	17
INTERESTING	86	82	67	50	40	88	89	83
NOT REPORTED	7	6	16	0	0	0	0	0
<u>MY JOB UTILIZES MY TALENTS:</u>								
LITTLE OR NOT AT ALL	7	15	0	62	40	38	33	17
FAIRLY WELL TO VERY WELL	57	79	67	38	40	62	67	83
EXCELLENTLY TO PERFECTLY	29	3	17	0	20	0	0	0
NOT REPORTED	7	3	16	0	0	0	0	0
<u>MY JOB UTILIZES MY TRAINING:</u>								
LITTLE OR NOT AT ALL	7	23	33	50	80	50	100	58
FAIRLY WELL TO VERY WELL	50	59	50	38	0	38	0	42
EXCELLENTLY TO PERFECTLY	36	18	0	12	20	12	0	0
NOT REPORTED	7	0	17	0	0	0	0	0
<u>I PLAN TO REENLIST:</u>								
NO OR PROBABLY NO	7	62	50	50	80	38	78	66
YES OR PROBABLY YES	93	32	50	50	20	62	22	17
NOT REPORTED	0	6	0	0	0	0	0	17

TABLE 7  
RELATIVE TIME SPENT ON DUTIES BY JOB CLUSTERS

DUTY	WEATHER FORECASTERS (N=570)	AFGC FORECASTERS (N=70)	WEATHER OBSERVERS (N=766)	FORECASTER SUPPORT PERSONNEL (N=99)	WEATHER MANAGERS (N=72)	SOLAR FORECASTERS (N=23)	COMPUTER PROGRAMMING/ PROCESSING PERSONNEL (N=61)
<u>MANAGEMENT, SUPERVISION, AND TRAINING FUNCTIONS</u>							
ORGANIZING AND PLANNING	4	1	*	*	20	5	3
DIRECTING AND IMPLEMENTING	6	3	1	2	30	9	6
INSPECTING AND EVALUATING	4	1	*	*	20	4	2
TRAINING	4	2	1	1	15	4	3
<u>OBSERVATION FUNCTIONS</u>							
PERFORMING WEATHER OBSERVING FUNCTIONS	12	2	58	28	2	8	*
SERVICING WEATHER OBSERVING EQUIPMENT	3	*	14	13	1	5	*
<u>FORECASTING FUNCTIONS</u>							
ANALYZING WEATHER INFORMATION	21	52	1	3	2	2	2
DISSEMINATING WEATHER INFORMATION	27	21	4	8	4	*	1
<u>COMMON OBSERVATION AND FORECASTING FUNCTIONS</u>							
OBSERVING WEATHER BY RADAR	5	*	5	3	*	*	*
PERFORMING ELECTRONIC PROCESSING OF WEATHER INFORMATION	*	*	*	3	2	2	80
PREPARING DOCUMENTS, FORECASTS, OR PLOTTING WEATHER INFORMATION	11	8	11	36	2	2	*
<u>SPECIAL WEATHER FUNCTIONS</u>							
TAKING UPPER AIR OBSERVATIONS	*	*	2	*	*	*	*
OBSERVING WEATHER ON RECONNAISSANCE AIRCRAFT	*	*	*	*	*	*	*
MAKING ROCKETS/SONDE WEATHER OBSERVATIONS	*	*	*	*	*	*	*
EDITING WEATHER MESSAGES MANUALLY	*	*	*	*	*	*	*
FORECASTING ACTIVITIES AT WEATHER CENTRAL	*	7	*	*	*	*	1
PERFORMING WEATHER FORECASTING RELATED TASKS	2	*	*	*	*	*	*
SOLAR OBSERVATION AND FORECASTING	*	*	*	*	*	58	*
PROCESSING SATELLITE OPERATING SYSTEM PICTURES	*	*	*	*	*	*	*

\* LESS THAN ONE PERCENT

TABLE 8  
RELATIVE TIME SPENT ON DUTIES BY INDEPENDENT JOB TYPES

DUTY	WEATHER INSTRUCTORS (N=14)	RAWINSONDE OPERATORS (N=34)	STAFF OPERATIONS PERSONNEL (N=6)	WEATHER EDITORS (N=8)	DATA INPUT SPECIALISTS (N=5)	SPECIAL PROJECT FORECASTERS (N=8)	SATELLITE DATA ACQUISITION PERSONNEL (N=9)	DROPSONDE SYSTEMS OPERATORS (N=12)
23								
MANAGEMENT, SUPERVISION, AND TRAINING FUNCTIONS								
ORGANIZING AND PLANNING	4	2	23	*	*	3	4	3
DIRECTING AND IMPLEMENTING	8	3	43	7	3	10	6	4
INSPECTING AND EVALUATING	4	2	20	2	*	5	6	*
TRAINING	42	3	6	2	*	5	9	15
OBSERVATION FUNCTIONS								
PERFORMING WEATHER OBSERVING FUNCTIONS	1	12	*	13	31	*	4	7
SERVICING WEATHER OBSERVING EQUIPMENT	*	11	*	10	26	*	1	1
FORECASTING FUNCTIONS								
ANALYZING WEATHER INFORMATION	23	1	2	5	1	17	*	*
DISSEMINATING WEATHER INFORMATION	6	4	*	3	*	17	1	4
COMMON OBSERVATION AND FORECASTING FUNCTIONS								
OBSERVING WEATHER BY RADAR	10	*	*	*	*	*	*	*
PERFORMING ELECTRONIC PROCESSING OF WEATHER INFORMATION	*	2	5	28	29	25	17	*
PREPARING DOCUMENTS, FORECASTS, OR PLOTTING WEATHER INFORMATION	2	3	*	4	10	6	*	*
SPECIAL WEATHER FUNCTIONS								
TAKING UPPER AIR OBSERVATIONS	*	57	*	*	*	*	*	*
OBSERVING WEATHER ON RECONNAISSANCE AIRCRAFT	*	*	*	*	*	*	*	64
MAKING ROCKETSONDE WEATHER OBSERVATIONS	*	*	*	*	*	*	*	*
EDITING WEATHER MESSAGES MANUALLY	*	*	*	25	*	*	*	*
FORECASTING ACTIVITIES AT WEATHER CENTRAL	*	*	*	*	*	8	*	*
PERFORMING WEATHER FORECASTING RELATED TASKS	1	*	*	*	*	*	*	*
SOLAR OBSERVATION AND FORECASTING	*	*	*	*	*	*	*	*
PROCESSING SATELLITE OPERATING SYSTEM PICTURES	*	*	*	*	*	*	50	*

\* LESS THAN ONE PERCENT



## ANALYSIS OF DAFSC GROUPS

In conjunction with identifying the job structure of the career ladder, it is also important to examine differences among the weather personnel with respect to the different skill level groups. The DAFSC analysis provides information used to analyze how accurately career field documents, such as AFR 39-1 specialty descriptions and the Specialty Training Standard (STS), reflect the tasks and jobs performed by career ladder incumbents in the field.

The analysis of the DAFSC groups reinforces the findings in the CAREER LADDER STRUCTURE that weather observer and forecaster personnel perform distinctly different types of jobs. These differences are readily apparent in Table 9, which presents the relative percent time spent by skill level groups for each duty. Duties in Table 9 are grouped by function to facilitate comparisons of the DAFSC groups. Lower skill level personnel (DAFSC 25130 and 25150) spend the majority of their time on tasks related to observing weather conditions, gathering local weather information, and servicing weather observing equipment. In contrast, DAFSC 25150A, 25170, and to some extent 25190 personnel, concentrate much of their time on forecaster functions which involve analyzing and disseminating weather information. The differences between the observer and forecaster groups are emphasized below in the discussion on the individual skill level groups.

### 251X0/A Skill Level Groups

DAFSC 25130. Apprentice Weather Specialists perform strictly weather observation and support tasks, such as advising forecasters of changing weather conditions, replacing teletype paper, and determining prevailing visibility values. Other representative tasks performed by 3-skill level personnel are in Appendix C1. Most of the DAFSC 25130 incumbents are concentrated within the Weather Observer Cluster, with 83 percent reporting they work at weather stations.

DAFSC 25150. Like DAFSC 25130 personnel, the majority of 5-skill level incumbents are in the Weather Observer Cluster. The most common tasks for the DAFSC 25150 incumbents (see Appendix C1) involve weather observation and observation equipment maintenance, such as briefing relief observers, replacing teletype paper, and determining existence and amount of obscuration.

Differences between the 3- and 5-skill level groups are minor, with 5-skill level personnel spending more time on supervisory tasks. Table 10 lists the tasks which best distinguish the two groups. Part of the difference in percent members performing these tasks for the two groups may be accounted for by the larger percent of DAFSC 25130 personnel working in weather stations (83 percent of 3-skill level versus 67 percent of 5-skill level incumbents) or the larger percent of DAFSC 25150 incumbents working overseas (24 percent of 5-skill level

versus four percent of 3-skill level personnel), where the teletype is used more frequently, and AWS Form 10 is not used as often. Overall, the lack of clearly differentiating tasks coupled with the high overlap in percent time spent (83 percent) between the two DAFSC groups is indicative of the similarity of the 3- and 5-skill level jobs.

DAFSC 25150A. In contrast to 25150 personnel, DAFSC 25150A incumbents spend most of their time analyzing and disseminating weather information. More than 60 percent of the 25150A personnel are in the Weather Forecaster cluster. The common tasks performed by the A-shred respondents are listed in Appendix C2. These technical tasks all involve various aspects of weather forecasting, such as issuing weather forecasts, analyzing upper air charts, and preparing short range weather forecasts. Tasks such as these best distinguish the DAFSC 25150A group from the DAFSC 25150 group (see Table 11). Although a small percentage of A-shred respondents perform observer tasks, DAFSC 25150A personnel, like their 7-skill level counterparts, perform a variety of forecaster tasks.

DAFSC 25170. Weather Technicians perform the same technical tasks as AFSC 25150A airmen, but spend more time on supervisory duties. Like their A-shred counterparts, the most common tasks performed by 7-skill level incumbents (see Appendix C2) involve some aspect of weather forecasting. However, a comparison of the tasks presented in Table 12 which best distinguish between DAFSC 25150A and 25170 personnel indicates that more 7-skill level incumbents perform supervisory tasks, such as maintaining training records, counselling personnel, and conducting OJT. Because of these additional supervisory tasks, 7-skill level airmen perform a higher average number of tasks (100) than do DAFSC 25150A incumbents (75).

DAFSC 25190. Nine-skill level incumbents have the broadest job of any group in the Weather career ladder, as they perform an average of 125 tasks. Although they spend a majority of their time on supervisory and managerial level tasks, these senior weather incumbents still spend some time performing technical tasks. The list of representative tasks performed by these 106 incumbents includes writing correspondence, preparing APRs, and attending conferences or policy meetings (see Appendix C3). Also included in this list are technical tasks, such as encode weather forecasts, analyze facsimile products, and prepare short range weather forecasts.

Table 13 lists those tasks which distinguish between 7- and 9-skill level incumbents on the basis of percent members performing tasks. A slightly larger percentage of 7-skill level incumbents perform tasks involving weather forecasting, such as analyzing synoptic surface and local area charts. However, supervisory tasks, such as scheduling leaves and passes and interpreting policies, directives or procedures for subordinates, are more indicative of DAFSC 25190 personnel. This data indicates that in many circumstances, 9-skill level incumbents are first-line supervisors.

CEM CODE 21500. As expected, CEM Code 25100 personnel spend most of their time on managerial as well as some supervisory tasks. Only four of the top 100 tasks performed by this group were related to weather observation or forecasting functions. Some representative tasks shared by these Chief Enlisted Managers include writing correspondence, attending conferences or policy meetings, and developing work methods or procedures (see Appendix C3).

Supervisory and managerial tasks best distinguish CEM Code 25100 personnel from 9-skill level incumbents (see Table 14). DAFSC 25190 personnel are more involved in performing tasks related to direct supervision of personnel and to technical functions. In contrast, managerial and staff related tasks, such as evaluate operating reports, draft budget or financial requirements, and write staff studies, surveys, or special reports, are more typical of the Chief Enlisted Managers.

### Summary

The DAFSC analysis results indicate a distinct break in the types of tasks performed by DAFSC 25130 and 25150 incumbents and those performed by DAFSC 25150A and 25170 personnel. Three- and 5-skill level incumbents spend a majority of their time performing tasks related to various aspects of weather observation, such as determining station pressure and filing teletype messages. DAFSC 25150A and 25170 incumbents are primarily weather forecasters who perform such tasks as issuing weather forecasts and analyzing upper air charts. DAFSC 25190 personnel appear to be the first line supervisors in the career ladder. Although their primary emphasis is on supervisory functions, they also perform weather forecasting and some observing tasks. While 9-skill level personnel are the first-line supervisors, CEM Code 25100 incumbents spend their time on managerial and staff functions.



TABLE 9

## PERCENT TIME SPENT PERFORMING DUTIES BY DAFSC GROUPS

DUTY	DAFSC 25130 (N=107)	DAFSC 25150 (N=889)	DAFSC 25150A (N=71)	DAFSC 25170 (N=675)	DAFSC 25190 (N=106)	CEM CODE 25100 (N=27)
<u>MANAGEMENT, SUPERVISION, AND TRAINING FUNCTIONS</u>						
ORGANIZING AND PLANNING	*	1	*	4	11	19
DIRECTING AND IMPLEMENTING	*	3	2	7	19	28
INSPECTING AND EVALUATING	*	*	*	4	11	24
TRAINING	*	2	*	5	10	10
<u>OBSERVATION FUNCTIONS</u>						
PERFORMING WEATHER OBSERVING FUNCTIONS	56	47	12	9	7	5
SERVICING WEATHER OBSERVING EQUIPMENT	14	13	3	3	2	*
<u>FORECASTING FUNCTIONS</u>						
ANALYZING WEATHER INFORMATION	*	2	24	23	11	5
DISSEMINATING WEATHER INFORMATION	3	5	26	22	12	5
<u>COMMON OBSERVATION AND FORECASTING FUNCTIONS</u>						
OBSERVING WEATHER BY RADAR	5	4	5	4	2	*
PERFORMING ELECTRONIC PROCESSING OF WEATHER INFORMATION	1	4	6	5	5	*
PREPARING DOCUMENTS, FORECASTS, OR PLOTTING WEATHER INFORMATION	14	13	10	9	4	2
<u>SPECIAL WEATHER FUNCTIONS</u>						
TAKING UPPER AIR OBSERVATIONS	3	3	3	*	*	*
OBSERVING WEATHER ON RECONNAISSANCE AIRCRAFT	*	*	*	*	*	*
MAKING ROCKETSONDE WEATHER OBSERVATIONS	*	*	*	*	*	*
EDITING WEATHER MESSAGES MANUALLY	*	*	*	*	*	*
FORECASTING ACTIVITIES AT WEATHER CENTRAL	*	*	3	2	*	*
PERFORMING WEATHER FORECASTING RELATED TASKS	*	*	2	2	1	*
SOLAR OBSERVATION AND FORECASTING	*	*	2	1	2	*
PROCESSING SATELLITE OPERATING SYSTEM PICTURES	*	*	*	*	*	*

\* LESS THAN ONE PERCENT



TABLE 10

TASKS WHICH BEST DISTINGUISH DAFSC 25130 AND 25150 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

<u>TASK</u>	<u>DAFSC 25130 (N=107)</u>	<u>DAFSC 25150 (N=889)</u>	<u>DIFF</u>
E181 PREPARE CONUS METEOROLOGICAL DATA SYSTEM (COMEDS) MESSAGES	76	50	+26
E141 COMPLETE AWS FORM 10	83	63	+20
Q506 PLOT AIRWAYS CODES	67	48	+19
E155 DETERMINE SEA LEVEL PRESSURE	81	63	+18
E165 FILE TELAUTOGRAPH OR ELECTROWRITER ROLLS	80	65	+15
E172 MEASURE HEIGHT OF CLOUD LAYER USING ROTATING BEAM CEILOMETER	77	62	+15
F216 REPLACE BAROGRAPH CHARTS	77	62	+15
F201 TRANSMIT REPORTS OF RUNWAY SURFACE CONDITIONS	77	63	+14
E157 DETERMINE TRUE AND MAGNETIC WIND DIRECTION	86	72	+14
F213 PERFORM SAFETY CHECKS	25	39	-14
E168 MAINTAIN VISIBILITY CHARTS	10	24	-14
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	18	33	-15
N470 TRANSMIT CODED WEATHER INFORMATION	17	32	-15
Q520 PLOT SYNOPTIC CODES	22	37	-15
Q515 PLOT POSITION OF TROPICAL STORMS	2	17	-15
E186 PREPARE TELETYPE TAPES	10	26	-16
E185 PREPARE TELETYPE REPORTS	17	34	-17
D105 CONDUCT OJT	7	25	-18

TABLE 11

TASKS WHICH BEST DISTINGUISH DAFSC 25150 AND 25150A PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 25150 (N=889)	DAFSC 25150A (N=71)	DIFF
E137 BRIEF RELIEF OBSERVERS	82	18	+64
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	77	17	+60
E166 FILE TELETYPE MESSAGES	80	27	+53
E198 TEAR MAPS FROM FACSIMILE PRINTER	75	24	+51
E139 CHECK TELETYPE DATA WITH ENTRIES ON AWS FORM 10	64	13	+51
F218 REPLACE FACSIMILE PAPER	75	24	+51
E135 ANNOTATE RECORDING INSTRUMENT CHARTS	68	18	+50
F224 REPLACE WIND RECORDER CHARTS	68	18	+50
N422 BRIEF AIR CREWS	4	57	-53
N429 ENCODE WEATHER FORECASTS	12	66	-54
Q529 REVIEW "BUST REVIEWS"	1	55	-54
L345 ANALYZE UPPER LEVEL WINDS	5	59	-54
N457 PREPARE SHORT RANGE WEATHER FORECASTS	1	59	-58
L344 ANALYZE UPPER AIR CHARTS	8	68	-60
N436 ISSUE WEATHER FORECASTS	5	71	-66
N421 AMEND WEATHER FORECASTS	3	70	-67

TABLE 12

TASKS WHICH BEST DISTINGUISH DAFSC 25150A AND 25170 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 25150A (N=71)	DAFSC 25170 (N=675)	DIFF
N441 PERFORM WEATHER SUPPORT FOR AIR REFUELING OPERATIONS	54	43	+11
G237 PERFORM WEEKLY OPERATIONAL CHECKS (RADAR)	42	33	+ 9
H257 OBTAIN BALLOON RELEASE CLEARANCE	13	4	+ 9
N459 PREPARE TELEVISION WEATHER FORECAST	27	18	+ 9
G233 PERFORM DAILY OPERATIONAL CHECKS (RADAR)	48	40	+ 8
G238 TAKE PHOTOGRAPHS OF RADAR SCOPE PRESENTATIONS	45	38	+ 7
B75 WRITE CORRESPONDENCE	13	39	-26
D109 COUNSEL TRAINEES ON TRAINING PROGRESS	6	32	-26
B33 ATTEND CONFERENCES OR POLICY MEETINGS	10	36	-26
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	4	32	-28
D105 CONDUCT OJT	14	42	-28
C97 PREPARE APRs	10	39	-29
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRU- CTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	4	33	-29
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	10	39	-29
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	4	36	-32



TABLE 13

TASKS WHICH BEST DISTINGUISH DAFSC 25170 AND 25190 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 25170 (N=675)	DAFSC 25190 (N=106)	DIFF
L341 ANALYZE SYNOPTIC SURFACE CHARTS	66	48	+18
L330 ANALYZE LOCAL AREA CHARTS	75	58	+17
L345 ANALYZE UPPER LEVEL WINDS	63	46	+17
L344 ANALYZE UPPER AIR CHARTS	72	56	+16
Q529 REVIEW "BUST REVIEWS"	66	50	+16
L352 DETERMINE EFFECTED WEATHER SYSTEM ACTIVITY THROUGH USE OF PROBABILITY TABLES	40	25	+15
L329 ANALYZE JET STREAM CHARTS	49	34	+15
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	13	55	-42
B75 WRITE CORRESPONDENCE	39	81	-42
C81 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	17	60	-43
B68 SELECT PERSONNEL FOR ADVANCED TRAINING	10	54	-44
C98 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	11	56	-45
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	32	77	-45
B36 CONDUCT SUPERVISORY ORIENTATION OF NEWLY ASSIGNED PERSONNEL	20	66	-46
A32 SCHEDULE LEAVES OR PASSES	18	65	-47
B74 SUPERVISE WEATHER TECHNICIANS (AFSC 25170)	14	64	-50

TABLE 14

TASKS WHICH BEST DISTINGUISH DAFSC 25190 AND CEM CODE 25100 PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASK	DAFSC 25190 (N=106)	CEM CODE 25100 (N=27)	DIFF
B71 SUPERVISE WEATHER SPECIALISTS (AFSC 25150)	58	18	+40
B72 SUPERVISE WEATHER SPECIALISTS (AFSC 25150A)	46	11	+35
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	59	26	+33
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	59	26	+33
B54 INITIATE REQUESTS FOR CERTIFICATION OF FORECASTERS AND OBSERVERS	51	18	+33
B61 PERFORM AS STATION CHIEF	44	11	+33
N429 ENCODE WEATHER FORECASTS	62	29	+33
Q529 REVIEW "BUST REVIEWS"	51	19	+32
A6 DETERMINE TRANSPORTATION REQUIREMENTS	20	44	-24
C89 EVALUATE SECURITY PROGRAMS	12	37	-25
C86 EVALUATE OPERATING REPORTS	34	59	-25
A4 DETERMINE PUBLICATION REQUIREMENTS	51	82	-31
A12 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	21	56	-35
C77 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	24	60	-36
C101 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	38	85	-47

## COMPARISON OF AFR 39-1 SPECIALTY DESCRIPTIONS WITH SURVEY DATA

Survey data were compared with the specialty descriptions in AFR 39-1 for AFSCs 25130, 25150/A, 25170, 25190, and CEM Code 25100. Except for one minor discrepancy in the AFSC 25190 specialty description, AFR 39-1 provides a comprehensive portrayal of the duties and responsibilities of the career ladder incumbents. It also contains tasks which reflect the specialized jobs these weather personnel perform.

One area included in the AFSC 25190 specialty description which might be considered questionable concerns the orientation and operation of rawinsonde equipment. Less than two percent of the personnel surveyed indicated they work with rawinsonde equipment. Only DAFSC 25150, 25150A, and 25170 were identified in this group. Personnel from four rawinsonde weather organizations were contacted and verified the survey finding that 9-skill level incumbents do not operate rawinsonde equipment. This finding indicates that this area of the AFSC 25190 specialty description should be considered for deletion.



## ANALYSIS OF EXPERIENCE (TAFMS) GROUPS

Utilization patterns for survey respondents in various TAFMS groups were reviewed to determine differences in the tasks incumbents performed. The typical trend of an increasing percentage of time spent on supervisory duties with increasing months TAFMS is indicated in Table 15. However, it was not until the sixth enlistment (241+ months TAFMS) that personnel devoted more time on supervisory and management functions than on tasks related to forecaster and observer duties. This appears to support the findings in the DAFSC analysis that 9-skill level and CEM Code personnel are the supervisors and managers of the career field, since 43 percent of the DAFSC 25190 incumbents and 89 percent of the CEM Code 25100 respondents have more than 241 months TAFMS.

The distribution of relative percent time spent also indicates the second enlistment serves as a transition period where a shift in emphasis from performing observation functions to forecasting functions occurs. First enlistment personnel spend the majority of their time performing weather observation functions and servicing observation equipment. During the second enlistment, personnel begin shifting emphasis to forecasting. The third-term airmen spend more time than any other TAFMS group on forecasting duties, such as analyzing and disseminating weather information.

### First Job Assignment Personnel

For the purpose of analyzing training, the TAFMS analysis concentrates on first enlistment groups. Tables 16 and 17 highlight the common tasks first-term respondents perform. As indicated by the tables, first enlistment airmen perform tasks which can be identified as technical or supportive in nature, both of which are typically performed by weather observers. The support tasks, such as briefing relief observers, filing teletype messages, and changing printer ribbons are common tasks personnel in both the Weather Observer and Forecaster Support Personnel clusters perform. In addition to the support tasks, personnel in the Weather Observer cluster also perform a core of technical tasks related to determining various local weather conditions.

In performing the tasks listed in Tables 16 and 17, the first-term incumbents work with a variety of weather information and communication equipment, such as ceilometer, telautograph, and automatic telephone answering service (see Table 18). The relatively low percentages of members using the equipment listed reflect the specialization of some jobs performed by first-term personnel. Another possible reason for these low percentages is that some equipment may not be available to incumbents at all weather facilities.

TABLE 15

PERCENT TIME SPENT PERFORMING DUTIES BY AFMS GROUPS

DUTY	MONTHS AFMS				
	1-48 (N=689)	49-96 (N=457)	97-144 (N=232)	145-192 (N=174)	193-240 (N=237)
					241+ (N=110)
<u>MANAGEMENT, SUPERVISION, AND TRAINING FUNCTIONS</u>					
ORGANIZING AND PLANNING	*	2	3	5	8
DIRECTING AND IMPLEMENTING	2	3	4	8	13
INSPECTING AND EVALUATING	*	1	2	4	8
TRAINING	1	2	3	6	8
<u>OBSERVATION FUNCTIONS</u>					
PERFORMING WEATHER OBSERVING FUNCTIONS	48	32	15	12	10
SERVICING WEATHER OBSERVING EQUIPMENT	13	9	4	3	3
<u>FORECASTING FUNCTIONS</u>					
ANALYZING WEATHER INFORMATION	2	12	21	18	15
DISSEMINATING WEATHER INFORMATION	5	13	22	21	16
<u>COMMON OBSERVATION AND FORECASTING FUNCTIONS</u>					
OBSERVING WEATHER BY RADAR	4	5	4	4	3
PERFORMING ELECTRONIC PROCESSING OF WEATHER INFORMATION	5	3	5	5	6
PREPARING DOCUMENTS, FORECASTS, OR PLOTTING WEATHER INFORMATION	13	12	11	9	6
<u>SPECIAL WEATHER FUNCTIONS</u>					
TAKING UPPER AIR OBSERVATIONS	4	2	*	*	*
OBSERVING WEATHER ON RECONNAISSANCE AIRCRAFT	*	1	*	*	*
MAKING ROCKETSONDE WEATHER OBSERVATIONS	*	*	*	*	*
EDITING WEATHER MESSAGES MANUALLY	1	*	*	*	*
FORECASTING ACTIVITIES AT WEATHER CENTRAL	*	1	1	1	1
PERFORMING WEATHER FORECASTING RELATED TASKS	*	1	2	2	1
SOLAR OBSERVATION AND FORECASTING	*	*	2	2	1
PROCESSING SATELLITE OPERATING SYSTEM PICTURES	*	*	*	*	*

\* LESS THAN ONE PERCENT

TABLE 16

## COMMON SUPPORT TASKS PERFORMED BY FIRST TERM RESPONDENTS

TASK	PERCENT MEMBERS PERFORMING
E137 BRIEF RELIEF OBSERVERS	81
F222 REPLACE TELETYPE PAPER	81
E166 FILE TELETYPE MESSAGES	80
F208 CHANGE PRINTER RIBBONS	80
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	78
E198 TEAR MAPS FROM FACSIMILE PRINTER	75
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	75
F210 CHECK ACCURACY OF CLOCK	75
E164 FILE PLOTTED MAPS OR CHARTS	75
F218 REPLACE FACSIMILE PAPER	72

TABLE 17

## REPRESENTATIVE TECHNICAL TASKS PERFORMED BY FIRST-TERM RESPONDENTS

TASK	PERCENT MEMBERS PERFORMING
E150 DETERMINE DEW POINT	75
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	75
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	74
E146 DETERMINE ALTIMETER SETTINGS	74
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	74
E156 DETERMINE STATION PRESSURE	74
E154 DETERMINE PREVAILING VISIBILITY VALUES	74
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	73
E147 DETERMINE BAROMETRIC PRESSURE	73
E159 DETERMINE VERTICAL VISIBILITY	70



TABLE 18

EQUIPMENT USED BY FIRST-TERM PERSONNEL  
(1-48 MONTHS AFMS)

<u>EQUIPMENT</u>	<u>PERCENT MEMBERS USING</u>
CEILOMETER (ROTATING)	58
TELAUTOGRAPH	57
AN/GMQ 10 TRANSMISSOMETER	57
METRO-TO-FORECASTER SERVICE (PMSV)	51
REPRODUCTION EQUIPMENT	40
RADAR SET AN/FPS 77	40
TYPEWRITER	31
AUTOMATIC TELEPHONE ANSWERING SERVICE	26
COMPUTERS	23
CLOSED CIRCUIT TELEVISION	22
TACTICAL WEATHER EQUIPMENT, KIT	20
ALDEN MINIFAX RECORDER	15
AN/GMQ WIND SET	14
THEODOLITE	14
1680 MHZ TRANSPONDER, TMQ 11	14
AN/TPQ-11	13
1680 MHZ TRANSPONDER, FMN 1 COMPUTER	13
AN/TMQ-1 WEATHER OBSERVING KIT	10

## JOB SATISFACTION INDICATORS

Job interest, perceived utilization of talents and training, and reenlistment intentions for AFMS groups are provided in Table 19 along with comparative sample data compiled for all Direct Support career ladders surveyed in 1978. (The total comparative sample of 12,586 airmen included the following AFSCs: 472X0, 472X1A, 472X1B, 472X1C, 472X1D, 472X2, 472X3, 542X2, 544X0, 554X0, 571X0, 601X4, 602X0, 602X1, 622X1, 645X0, 645X0A, 645X1, and 645X2.) A comparison of the two groups' responses reveals little difference in their perceptions of job interest and utilization of talents and training. The 1-24 month 251X0 personnel have high job interest and are more inclined to reenlist than the Air Force comparative group. However, where job interest is about the same and reenlistment intention is higher for 25-241+ month personnel in the comparative specialties, reenlistment intention for 25-96 month 251X0 personnel is substantially lower. These findings are highlighted when job satisfaction indicators for different DAFSC groups are presented (see Table 20). The most striking finding in Table 20 is that 60 percent of the DAFSC 25150 personnel and 66 percent of 25150A incumbents reported they do not plan to reenlist. This information is even more surprising for the A-shred personnel since they have a more favorable perception of their job and how their talents and training are used than do 25150 incumbents.

Weather respondents indicated some reasons for the low reenlistment intentions through write-in comments on the survey instrument. Eleven percent of the respondents volunteered comments indicating they would probably not reenlist. These remarks centered around a combination of both Air Force and Weather career ladder problems. Military pay, "decreasing benefits" and job stability were some reasons given for not reenlisting. These respondents also expressed frustration over poor promotion opportunity, lack of opportunity to cross-train, and nonchallenging working conditions. Other personnel indicated they were separating in order to pursue educational goals. Some of these reasons involve external factors which do not directly impact the incumbents' perception of their job environment. This may provide an explanation why some incumbents have favorable perceptions of their jobs, yet choose not to reenlist. Weather career field managers are already aware of this reenlistment problem, and are working toward resolving it.

TABLE 19  
COMPARISON OF JOB SATISFACTION INDICES BY AFMS GROUPS  
(PERCENT MEMBERS RESPONDING)

	1-24 MONTHS AFMS		25-48 MONTHS AFMS		49-96 MONTHS AFMS		97+ MONTHS AFMS	
	251X0 (N=186)	COMPARATIVE SAMPLE* (N=2,715)	251X0/A (N=503)	COMPARATIVE SAMPLE* (N=2,819)	251X0/A (N=457)	COMPARATIVE SAMPLE* (N=2,356)	251X0/A (N=753)	COMPARATIVE SAMPLE* (N=4,652)
<u>I FIND MY JOB:</u>								
DULL	13	15	24	18	20	13	8	9
SO-SO	11	20	14	20	15	19	8	12
INTERESTING	73	62	59	59	63	65	78	75
NOT REPORTED	3	3	3	3	2	3	6	4
<u>MY JOB UTILIZES MY TALENTS:</u>								
LITTLE OR NOT AT ALL	26	30	38	32	30	26	15	16
FAIRLY WELL TO VERY WELL	64	62	55	60	61	64	63	61
EXCELLENTLY TO PERFECTLY	9	7	6	7	7	9	20	21
NOT REPORTED	1	1	1	1	2	1	2	2
<u>MY JOB UTILIZES MY TRAINING:</u>								
LITTLE OR NOT AT ALL	20	24	28	27	23	25	19	18
FAIRLY WELL TO VERY WELL	62	65	59	62	64	63	59	58
EXCELLENTLY TO PERFECTLY	15	10	12	9	12	10	19	22
NOT REPORTED	3	1	1	2	1	2	3	2
<u>I PLAN TO REENLIST:</u>								
NO OR PROBABLY NO	55	62	67	53	53	30	33	24
YES OR PROBABLY YES	40	35	30	43	44	66	63	72
NOT REPORTED	5	3	3	4	3	4	4	4

\* THE COMPARATIVE SAMPLE WAS TAKEN FROM ALL DIRECT SUPPORT CAREER LADDERS SURVEYED IN 1978. (AFSCs 472X0, 472X1A, 472X1B, 472X1C, 472X1D, 472X2, 472X3, 542X2, 544X0, 554X0, 571X0, 601X4, 602X0, 602X1, 622X1, 645X0, 645X0A, 645X1, AND 645X2; N=12,586)



TABLE 20

COMPARISON OF JOB SATISFACTION INDICES FOR DAFSC GROUPS  
(PERCENT MEMBERS RESPONDING)

	DAFSC 25130 (N=107)	DAFSC 25150 (N=889)	DAFSC 25150A (N=71)	DAFSC 25170 (N=675)	DAFSC 25190 (N=106)	CEM CODE 25100 (N=27)
<u>I FIND MY JOB:</u>						
DULL	8	24	10	8	9	4
SO-SO	8	16	11	9	3	11
INTERESTING	83	57	76	78	84	67
NOT REPORTED	1	3	3	5	4	18
<u>MY JOB UTILIZES MY TALENTS:</u>						
LITTLE OR NOT AT ALL	21	37	20	15	8	7
FAIRLY WELL TO VERY WELL	72	56	72	65	55	52
EXCELLENTLY TO PERFECTLY	6	5	8	18	36	33
NOT REPORTED	1	2	0	2	1	8
<u>MY JOB UTILIZES MY TRAINING:</u>						
LITTLE OR NOT AT ALL	16	28	21	18	16	22
FAIRLY WELL TO VERY WELL	68	58	68	62	52	48
EXCELLENTLY TO PERFECTLY	15	12	10	18	29	22
NOT REPORTED	1	2	1	2	3	8
<u>I PLAN TO REENLIST:</u>						
NO OR PROBABLY NO	43	60	66	34	44	48
YES OR PROBABLY YES	54	36	32	63	54	41
NOT REPORTED	3	4	2	3	2	11

## ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

A comparison was made of the tasks performed and of background data for DAFSC 25150/A respondents assigned to CONUS versus those in overseas locations. Tables 21 and 22, which present the representative tasks performed by CONUS and overseas incumbents, respectively, indicate the two groups perform similar jobs. Only one task, prepare teletype tapes, appears in the overseas list but not in the list of representative tasks for CONUS personnel. Typical observer tasks, such as filing teletype messages, briefing relief observers, and determining dew point, are performed by respondents from both groups.

The tasks that best differentiate CONUS and overseas 25150/A personnel are listed in Table 23. A greater percentage of CONUS personnel perform tasks such as prepare COMEDS messages, plot airways codes, and complete AWS Form 10. In contrast, more overseas incumbents prepare teletype reports, plot synoptic codes, and complete METAR forms (AWS Form 10A). There are also some differences between the types of equipment used by CONUS and overseas personnel (see Table 24). Weather station equipment such as the AN/FPS 77 radar set, close circuit television, and automatic telephone answering service appear to be more available for use by CONUS personnel. Tactical weather equipment, on the other hand, is used by a greater percentage of overseas personnel.

A comparison of background data indicates that CONUS respondents average more time in service (52 months AFMS versus 45 months for overseas respondents). They also perform a slightly higher average number of tasks (72 tasks versus 68 tasks for overseas incumbents). The reenlistment intentions of both groups is low, however, with only 39 percent of the overseas and 35 percent of this CONUS airmen planning to reenlist.

TABLE 21

REPRESENTATIVE TASKS PERFORMED BY DAFSC 25150/A PERSONNEL  
ASSIGNED WITHIN THE CONUS

TASK	PERCENT MEMBERS PERFORMING
F208 CHANGE PRINTER RIBBONS	76
F222 REPLACE TELETYPE PAPER	75
E137 BRIEF RELIEF OBSERVERS	75
E166 FILE TELETYPE MESSAGES	73
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	72
F218 REPLACE FACSIMILE PAPER	72
E198 TEAR MAPS FROM FACSIMILE PRINTER	72
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	72
E164 FILE PLOTTED MAPS OR CHARTS	71
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	69
E150 DETERMINE DEW POINT	69
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	68
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	68
E156 DETERMINE STATION PRESSURE	68
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	68
E146 DETERMINE ALTIMETER SETTINGS	68
E154 DETERMINE PREVAILING VISIBILITY VALUES	68
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	68
E147 DETERMINE BAROMETRIC PRESSURE	67
Q519 PLOT SKEW T CHARTS	67



TABLE 22

## REPRESENTATIVE TASKS PERFORMED BY DAFSC 25150/A PERSONNEL ASSIGNED OVERSEAS

TASK	PERCENT MEMBERS PERFORMING
E166 FILE TELETYPE MESSAGES	87
F222 REPLACE TELETYPE PAPER	85
E137 BRIEF RELIEF OBSERVERS	84
F208 CHANGE PRINTER RIBBONS	81
F218 REPLACE FACSIMILE PAPER	80
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	78
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	77
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	77
E150 DETERMINE DEW POINT	77
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	77
E154 DETERMINE PREVAILING VISIBILITY VALUES	77
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	77
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	77
E146 DETERMINE ALTIMETER SETTINGS	76
E156 DETERMINE STATION PRESSURE	75
E147 DETERMINE BAROMETRIC PRESSURE	75
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	75
E186 PREPARE TELETYPE TAPES	75
E198 TEAR MAPS FROM FACSIMILE PRINTER	72
Q519 PLOT SKEW T CHARTS	70
E164 FILE PLOTTED MAPS OR CHARTS	70

TABLE 23

TASK WHICH BEST DISTINGUISH CONUS AND OVERSEAS 25150/A PERSONNEL  
(PERCENT MEMBERS PERFORMING)

TASK	CONUS 25150/A	OVERSEAS 25150/A	DIFF
E181 PREPARE CONUS METEOROLOGICAL DATA SYSTEM (COMEDS) MESSAGES	61	6	55
Q506 PLOT AIRWAYS CODES	55	22	33
G228 ADJUST CONTROLS TO DETERMINE INTENSITY OF ECHOES	46	17	29
G231 DETERMINE TOPS OF ECHOES	48	19	29
E155 DETERMINE SEA LEVEL PRESSURE	66	39	27
E141 COMPLETE AWS FORM 10	66	39	27
E171 MEASURE HEIGHT OF CLOUD LAYER USING BALLOON	19	37	-18
Q520 PLOT SYNOPTIC CODES	31	52	-21
E185 PREPARE TELETYPE REPORTS	27	50	-23
F227 SWITCH COMMUNICATION MACHINE ON-AND-OFF THE LINE	36	61	-25
E142 COMPLETE METEOROLOGICAL AIRWAYS REPORT (METAR) FORMS (AWS FORM 10A)	15	59	-44
E186 PREPARE TELETYPE TAPES	10	75	-65

TABLE 24

COMPARISON OF EQUIPMENT USED BY CONUS AND OVERSEAS RESPONDENTS\*  
(PERCENT MEMBERS USING)

EQUIPMENT	CONUS	OVERSEAS	DIFF
RADAR SET AN/FPS 77	49	17	32
CLOSED CIRCUIT TELEVISION	30	2	28
AUTOMATIC TELEPHONE ANSWERING SERVICE	33	9	24
COMPUTERS	25	9	16
ALDEN MINIFAX RECORDER	19	7	12
REPRODUCTION EQUIPMENT	47	37	10
CARD PUNCH	10	3	7
TELAUTOGRAPH	60	53	7
WEATHER INFORMATION NETWORK DISPLAY EQUIPMENT	11	4	7
1680 MHZ TRANSPONDER, FMN 1 COMPUTER	15	9	6
1680 MHZ TRANSPONDER, TMQ 11	14	8	6
METRO-TO-FORECASTER SERVICE (PMSV)	53	50	3
CEILOMETER (ROTATING)	57	55	2
THEODOLITE	14	13	1
AN/GMQ WIND SET	16	16	0
AN/GMQ 10 TRANSMISSOMETER	57	57	0
AN/TMQ-1 WEATHER OBSERVING KIT	8	14	-6
TYPEWRITER	32	39	-7
TACTICAL WEATHER EQUIPMENT, KIT	15	34	-19

\* 25150/A PERSONNEL



## ANALYSIS OF TASK DIFFICULTY

Each of the 58 experienced NCOs in the special sample who completed a task difficulty booklet rated all of the inventory tasks on a nine-point scale from extremely low to extremely high difficulty, with difficulty defined as the length of time it takes an average incumbent to learn to do the task. Ratings were adjusted so that tasks of average difficulty have a rating of 5.00. The interrater reliability (as assessed through components of variance of standardized group means) for these experienced 251X0 raters was .96, indicating considerable agreement among the raters.

The result of the data obtained from these NCOs is an ordered listing of tasks based on the relative degree of difficulty assigned each task in the inventory. Table 25 provides a list of the 20 tasks AFSC 25170 NCOs rated most difficult. Respondents rated tasks related to computer programming and supervision and management functions as some of the most difficult tasks in the specialty. The two most difficult tasks are performing as enlisted detachment commander or as station chief. Some forecasting tasks, such as determining causes of abnormal weather system intensity and computing energy content of weather systems, were rated among the more difficult tasks.

Tables 26 and 27 list some tasks incumbents rated as average in difficulty and the 20 tasks they rated as least difficult. Tasks having average difficulty ratings are performed mostly by personnel in the more specialized job functions. The tasks rated as least difficult involve weather support functions such as filing, posting, and maintaining weather equipment.

### Job Difficulty Index (JDI)

Once the difficulty index is computed for each task, it is possible to compute a Job Difficulty Index (JDI) for the groups identified in this survey analysis. The JDI provides a relative measure of job difficulty for functional job groups which can be used to identify the more or less difficult jobs. The number of tasks performed and the average task difficulty per unit time spent (ATDPUTS) are the primary variables used to compute the JDI. The index ranges from one for very easy jobs to 25 for very difficult jobs. The indices are adjusted so that the average job difficulty index is 13.00. The average number of tasks performed and JDI ratings for the job groups identified in the Career Ladder Structure are listed in Table 28.

Two jobs within the Weather Forecasters cluster had the highest job difficulty indices. Weather Supervisors (JDI=20.2) and Unit Staff Weather Briefers (JDI=17.0) received high difficulty indices because of the large number of tasks and difficult nature of the tasks they perform. The Weather Supervisors perform the highest average number of tasks of any job identified in the career ladder. Members of both

job groups perform difficult tasks related to forecasting, but the supervisors also perform supervisory tasks while the weather briefers perform additional staff related functions.

A comparison of the JDI values indicates that Data Input Specialists (JDI=1.7) and AFGWC Support Personnel (JDI=3.1) have the two least difficult jobs identified in the analysis. The Data Input Specialists perform an average of only 10 tasks, spending most of their time keypunching weather information. AFGWC Support Personnel also perform few tasks (average 15 tasks), but spend much of their time plotting charts.

TABLE 25

## TASKS RATED MOST DIFFICULT BY 25170 RESPONDENTS

TASK	TASK DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING
B60 PERFORM AS ENLISTED DETACHMENT COMMANDER	8.24	1
B61 PERFORM AS STATION CHIEF	8.13	6
M373 DESIGN COMPUTER PROGRAMS FOR USE WITH SPECIFIC COMMUNICATIONS SYSTEM	7.93	1
M372 DESIGN AND DEVELOP WEATHER COMPUTER PROGRAMS	7.80	3
M371 DESIGN A REAL-TIME OPERATING SYSTEM FOR WEATHER COMPUTER PROGRAMS	7.48	*
A12 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	7.39	5
M362 BUILD DATA BASE	7.32	4
M375 DETERMINE WEATHER FACTORS TO BE USED IN COMPUTER PROGRAMS	7.12	2
M374 DETERMINE FLOW SEQUENCE OF COMPUTER PROGRAMS	7.08	2
M418 WRITE PROGRAMS IN FORTRAN LANGUAGE	6.94	3
C97 PREPARE APRs	6.89	21
M416 WRITE PROGRAMS IN ASSEMBLY LANGUAGE	6.88	1
C77 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	6.83	6
M417 WRITE PROGRAMS IN COBAL LANGUAGE	6.83	*
D128 PREPARE OR EVALUATE SKILL KNOWLEDGE TESTS (SKT)	6.83	*
O481 PREPARE SEVERE WEATHER ADVISORIES	6.80	2
O482 PREPARE SEVERE WEATHER POINT WARNINGS	6.80	2
L350 DETERMINE CAUSES OF ABNORMAL WEATHER SYSTEM INTENSITY	6.77	19
L348 COMPUTE ENERGY CONTENT OF WEATHER SYSTEMS	6.76	4
L349 DETERMINE CAUSE OF DEVIATIONS IN REPORTED CONDITIONS FROM STANDARD MODEL	6.75	13

\* LESS THAN ONE PERCENT



TABLE 26

## TASKS RATED AVERAGE IN DIFFICULTY BY 25170 RESPONDENTS

TASK	TASK DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING
N456 PREPARE RADIO WEATHER FORECASTS	5.03	5
M369 CORRECT TAPE FAULTS, INSTALL TAPE ENDS, AND LOAD POINTS	5.03	2
L327 ANALYZE HISTORICAL WEATHER RECORDS	5.02	21
R590 PROCESS PHOTOGRAPHIC FILM USING AUTOMATIC PROCESSORS	5.02	1
N438 PERFORM BRIEFINGS FOR NONWEATHER PERSONNEL	5.02	30
A18 PLAN ADMINISTRATIVE INSPECTIONS	5.01	6
B53 INITIATE PERSONNEL ACTION REQUESTS	5.01	9
K317 SURVEY CIVILIAN RADIO-INTERCEPT STATIONS	5.00	1
H247 DETERMINE HEIGHT OF BALLOON AT SPECIFIC INTERVALS	5.00	7
L328 ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	5.00	28
A25 PLAN SAFETY PROGRAMS	4.99	8
N450 PREPARE BRIEFING CHARTS	4.98	33
M394 PERFORM EMERGENCY SHUTDOWN PROCEDURES	4.98	2
Q536 PREPARE GRAPHS OF FORECASTING EFFECTIVENESS	4.98	6
A16 ESTABLISH PUBLICATION LIBRARIES	4.97	6
E163 ESTIMATE HEIGHT OF CLOUDS USING RAWINSONDE OBSERVATIONS	4.95	25

TABLE 27

## TASKS RATED LEAST DIFFICULT BY 25170 RESPONDENTS

TASK	TASK DIFFICULTY INDEX	PERCENT MEMBERS PERFORMING
H257 OBTAIN BALLOON RELEASE CLEARANCE	2.87	11
F219 REPLACE PAPER ON APT MACHINES	2.83	*
F218 REPLACE FACSIMILE PAPER	2.78	57
Q503 MAKE ENTRIES IN OBSERVER LOGS	2.77	48
F220 REPLACE PAPER ON TMQ-5	2.75	3
Q502 LOG REASON FOR ROUTINE DELAYED WEATHER (RTD) REPORTS	2.72	16
E135 ANNOTATE RECORDING INSTRUMENT CHARTS	2.68	49
Q528 POST SATELLITE MAPS	2.68	40
E165 FILE TELAUTOGRAPH OR ELECTROWRITER ROLLS	2.66	48
Q526 POST LOCAL WEATHER INFORMATION	2.66	48
Q525 POST CHARTS	2.63	59
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	2.59	8
F221 REPLACE TELAUTOWRITER PAPER	2.57	52
F227 SWITCH COMMUNICATIONS MACHINE ON-AND-OFF THE LINE	2.51	35
Q501 FILE SATELLITE MAPS	2.44	43
Q500 FILE CHARTS	2.43	63
F210 CHECK ACCURACY OF CLOCK	2.41	57
F222 REPLACE TELETYPE PAPER	2.40	64
F199 TEAR NOTICE TO AIRMEN (NOTAMS)	2.30	46
E198 TEAR MAPS FROM FACSIMILE PRINTER	2.11	59

\* LESS THAN ONE PERCENT

TABLE 28

COMPARISON OF JOB DIFFICULTY INDICES AMONG 251X0/A  
CAREER LADDER JOB GROUPS

		AVERAGE NUMBER OF TASKS PERFORMED	JDI
I.	WEATHER FORECASTERS (GRP094, N=570)	131	17.4
	a. Weather Supervisors (GRP176, N=139)	196	20.2
	b. Detachment Forecasters (GRP269, N=372)	116	16.9
	c. Unit Staff Weather Briefers (GRP267, N=18)	102	17.0
	d. Weather Information Forecasters (GRP124, N=24)	42	10.8
II.	AIR FORCE GLOBAL WEATHER CENTRAL (AFGWC) FORECASTERS (GRP116, N=70)	40	11.9
	a. Severe Weather Analysts (GRP225, N=18)	39	12.3
	b. Terminal Aerodrome Forecasters (GRP223, N=29)	40	11.7
	c. Weather Central Forecasters (GRP172, N=11)	45	11.6
	d. Chart Fabrication Personnel (GRP130, N=11)	41	12.0
III.	WEATHER INSTRUCTORS (GRP060, N=14)	45	12.4
IV.	WEATHER OBSERVERS (GRP082, N=766)	84	12.0
	a. Senior Weather Observers (GRP382, N=34)	137	16.8
	b. Weather Station Observers (GRP319, N=674)	83	11.8
	c. Organic Weather Team Members (GRP398, N=16)	57	10.1
	d. Range Observers (GRP283, N=14)	64	11.2
V.	FORECASTER SUPPORT PERSONNEL (GRP070, N=99)	32	5.5
	a. Unit Support Personnel (GRP219, N=46)	36	5.6
	b. Radar Support Observers (GRP236, N=16)	44	7.7
	c. AFGWC Support Personnel (GRP168, N=18)	15	3.1
VI.	RAWINSONDE OPERATORS (GRP145, N=34)	74	13.3
VII.	WEATHER MANAGERS (GRP065, N=72)	66	14.4
	a. Technical Advisors (GRP417, N=13)	93	16.8
	b. Weather Station Managers (GRP389, N=12)	81	16.4
	c. Detachment Commanders (GRP270, N=9)	79	15.6
	d. Weather Operations Superintendents (GRP197, N=12)	39	12.1
VIII.	STAFF OPERATIONS PERSONNEL (GRP157, N=6)	19	9.9
IX.	SOLAR FORECASTERS (GRP025, N=23)	41	11.6
	a. Astrogeophysical Radio Data Analysts (GRP222, N=5)	46	11.3
	b. Space Environmental Forecasters (GRP154, N=5)	43	13.0
	c. Solar Astrogeophysical Observers (GRP212, N=9)	49	12.1
X.	WEATHER EDITORS (GRP244, N=8)	24	7.3
XI.	DATA INPUT SPECIALISTS (GRP266, N=5)	10	1.7
XII.	COMPUTER PROGRAMMING AND PROCESSING PERSONNEL (GRP067, N=61)	34	12.9
	a. Automated Systems Analysts (GRP284, N=44)	34	13.3
	b. Center Data Base Monitors (GRP108, N=5)	24	10.3
XIII.	SPECIAL PROJECT FORECASTERS (GRP133, N=8)	66	14.7
XIV.	SATELLITE DATA ACQUISITION PERSONNEL (GRP199, N=9)	22	8.4
XV.	DROPSONDE SYSTEMS OPERATORS (GRP246, N=12)	21	8.5



## ANALYSIS OF TRAINING EMPHASIS

Training emphasis data was obtained from a selected sample of 51 experienced 251X0 NCOs who rated inventory tasks on a ten-point scale from zero (no training required) to ten (extremely heavy training required). Training emphasis ratings provide an indication of how much emphasis should be placed on structured training for first-term personnel. Structured training is defined as training provided at resident technical schools, Field Training Detachments (FTD), Mobile Training Teams (MTT), formal OJT, Career Development Courses (CDC), or any other organized training method.

The interrater reliability for the 51 respondents returning booklets is .96. The mean training emphasis rating for tasks in the inventory is 1.82, with a standard deviation of 1.69.

Table 29 presents the 15 tasks rated highest in training emphasis by 251X0 respondents. All of these tasks are typically performed by weather station observers. Generally, tasks involve determining specific weather conditions.

Tasks rated low in training emphasis are listed in Table 30. These tasks, which are related to computer processing and programming and solar observing, require specialized training and are primarily performed by qualified forecaster personnel.

These data provide a comprehensive overview of what a representative sample of senior NCOs in the field perceive should be trained for first-term airmen and the relative emphasis each area should have in such training. These data may be used in conjunction with other information to refine training documents and tailor training programs to current career field requirements.

TABLE 29

## TASKS RATED HIGHEST IN TRAINING EMPHASIS FOR FIRST-TERM 251X0 PERSONNEL

TASK	TRAINING EMPHASIS RATING	PERCENT MEMBERS PERFORMING* (N=666)
E141 COMPLETE AWS FORM 10	7.20	64
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	7.08	75
E147 DETERMINE BAROMETRIC PRESSURE	6.88	73
E154 DETERMINE PREVAILING VISIBILITY VALUES	6.88	74
E146 DETERMINE ALTIMETER SETTINGS	6.78	74
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	6.65	74
E159 DETERMINE VERTICAL VISIBILITY	6.57	70
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	6.53	75
E172 MEASURE HEIGHT OF CLOUD LAYER USING ROTATING BEAM CEILOMETER	6.45	63
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	6.43	75
E160 ENCODE MESSAGES	6.43	73
G230 DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENT	6.27	40
G231 DETERMINE TOPS OF ECHOES	6.24	40
E145 DECODE TELETYPE MESSAGES	6.22	63
E155 DETERMINE SEA LEVEL PRESSURE	6.18	64

\* DOES NOT INCLUDE ANY 25150A RESPONDENTS

TABLE 30

## TASKS RATED LOW IN TRAINING EMPHASIS FOR FIRST-TERM 251X0 PERSONNEL

TASK	TRAINING EMPHASIS RATING	PERCENT MEMBERS PERFORMING (N=666)
M372 DESIGN AND DEVELOP WEATHER COMPUTER PROGRAMS	.06	2
M377 EVALUATE COMPUTER OUTPUT FOR METEOROLOGICAL ACCURACY	.06	3
M389 MAINTAIN LOGS OF PRODUCTS, EQUIPMENT, AND OUTAGES	.06	6
M391 OPERATE ELECTRONIC DATA PLOTTERS	.06	*
M396 PREPARE COMPUTER PROGRAM DOCUMENTATION AND COMMENTS	.06	2
M399 PREPARE WEATHER EDP DETAILED FLOW CHARTS	.06	*
M405 RELAY SPECIAL DATA REQUESTS	.06	3
M407 RESEARCH OR IDENTIFY WEATHER INFORMATION FOR COMPUTER PROGRAMS	.06	1
M410 SET UP REQUIREMENTS FOR PROGRAM RUNS	.06	1
M413 TEST OR IMPLEMENT REAL-TIME WEATHER COMPUTER PROGRAMS	.06	2
M416 WRITE PROGRAMS IN ASSEMBLY LANGUAGE	.06	*
M418 WRITE PROGRAMS IN FORTRAN LANGUAGE	.06	2
R537 ANALYZE AURORAL FILMS	.06	*
R548 INTERPRET AND RECORD DATA FROM POLARIMETERS	.06	*
R552 LOAD NIKON CAMERAS	.06	*

\* LESS THAN ONE PERCENT OF SAMPLE



## ANALYSIS OF TRAINING DOCUMENTS

Survey and task factor data provide information which were used to examine key training documents, such as the Specialty Training Standard (STS) and the Plan of Instruction (POI). Technical training personnel at Chanute Technical Training Center (CTTC) matched survey tasks to related areas of the 251X0 STS, dated March 1977, and to areas of instructions from the 3ABR25130 POI. A computerized matching was then made, pairing task data such as training emphasis ratings, task difficulty ratings, and data for selected career ladder groups to the respective items in the training documents.

The computer matchings for the 251X0 STS and the 3ABR25130 Plan of Instruction were furnished to the Technical Training School at Chanute and Air Weather Service personnel for use during the Weather Training and Utilization Conference hosted by the Chanute Technical Training Center in November 1979. Data from the computer printouts provided information useful in making some decisions concerning projected changes to the 251X0 Specialty Training Standard. The training manager at Chanute TTC will be furnished another computerized matching for the revised STS at a future date to use in evaluating the Weather training program.

## COMPARISON OF CURRENT SURVEY WITH PREVIOUS SURVEYS

The results of this study were compared to the findings of both the June 1970 survey of the Weather Observer career ladder and the April 1972 survey of the Weather Forecaster career ladder. With one major exception, DAFSC 25130 and 25150 incumbents perform jobs similar to those performed by Weather Observer personnel in 1970. Unlike AFSC 25271 and 25290 incumbents who spent much of their time performing supervisory and management functions, very few Weather Specialists (AFSC 25150) have the opportunity to perform supervisory tasks other than those related to OJT functions. The Senior Weather Observers (N=34) are the only personnel identified in the present study who perform a job similar to the one performed by AFSC 25271 personnel. The loss of supervisory and managerial positions for observer personnel can be directly attributed to the reorganization of the Weather career field in 1975.

The only other noticeable difference between the AFSC 252X1 and 251X0 surveys involves changes in the equipment personnel in the two studies used. None of the incumbents in the present study reported performing weather surveillance on a WC-135 reconnaissance aircraft. Respondents in the 1979 study also provided write-in comments indicating they use a variety of computer and reproduction equipment which was not available at the time of the 1970 survey.

A comparison of the 1972 Weather Forecaster career ladder survey data with the present study also revealed some differences between the respective career ladder structures. The earlier study identified two job groups not found in the 1979 study. These two groups were Weather Analysts and Weather Analyst Supervisors. Although no one specific group of analysts was identified in the present study, two specialized groups were identified which contained forecaster qualified personnel who analyze data, but do not actually forecast. These groups include the Severe Weather Analysts and Chart Fabrication Personnel located at AFGWC. In addition, several other new job groups emerged in the present study: Terminal Aerodrome Forecasters, Weather Instructors, Technical Advisors, Detachment Commanders, Astrogeophysical Radio Data Analysts, Space Environmental Foreceasters, Solar Astrogeophysical Observers, and Special Project Forecasters. All of these groups are either job types identified within clusters or independent job types. The identification of the new groups tends to suggest that forecaster personnel are becoming more specialized in the jobs they perform.

One particular finding of interest in the 1972 survey was also found in the present study. In the earlier study, 7-skill level incumbents were primarily technicians, while the 9-skill level airmen performed both technical and supervisor tasks. The present study also indicates that it is not until the incumbent reaches the 9-skill level that he spends a large portion of his time on supervisory and managerial tasks. It appears that these senior NCOs continue to perform as first-line supervisors in many units.

## DISCUSSION

The combination of the Weather Forecaster (AFSC 253X0) and Observer (252X1) career ladders has produced a relatively stable dual function job structure. The distinctions in the job functions and tasks which observers and forecasters performed earlier in this decade are still apparent in the present study. However, Weather career ladder (AFSC 251X0) managers have effectively used advancements in computer and communication systems technology to provide a more centralized system which compiles, analyzes, and disseminates weather data instead of placing the primary emphasis on local weather station observations and forecasts. These technological gains have resulted in more specialized jobs for many weather personnel and greater reliance on AFGWC forecasts. This trend of specialization and reliance on centralized weather data should continue as more emphasis is placed on the applications of statistical and mathematical concepts to compute climatological and meteorological data. The future should also see the discovery of new applications of solar and satellite data which weather personnel can incorporate into the analysis and interpretation of weather data to provide even more accurate forecasts.

Although the trend toward centralization has enabled career ladder managers to optimize the technological advancements since the AFSC 253X0 and 252X1 studies (1972 and 1970), the present survey alerts managers to problems with job satisfaction and attrition for AFSC 251X0/A incumbents. Some job groups, such as Forecaster Support Personnel, Solar Forecasters, and Computer Programming and Processing Personnel, indicate their jobs do not effectively utilize their training. In addition, retention problems pertaining primarily to personnel in the 25-96 month AFMS groups were noted. Dealing with these kinds of problems will be extremely difficult. However, managers must consider them critical if the Air Force is to sustain a corps of highly qualified and motivated weather observers and forecasters.



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# APPENDIX A REPRESENTATIVE TASKS PERFORMED BY CAREER LADDER STRUCTURE GROUPS

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
FORECASTERS (GRP094, N=570)

TASK	PERCENT MEMBERS PERFORMING
N427 DECODE WEATHER FORECASTS	96
N420 AMEND OR CANCEL LOCAL WEATHER WARNINGS	95
N421 AMEND WEATHER FORECASTS	94
L330 ANALYZE LOCAL AREA CHARTS	94
N422 BRIEF AIR CREWS	94
N429 ENCODE WEATHER FORECASTS	94
N432 ISSUE LOCAL WEATHER WARNINGS	94
L338 ANALYZE SKEW T LOG P CHARTS	93
N436 ISSUE WEATHER FORECASTS	92
L323 ANALYZE FACSIMILE PRODUCTS	92
N464 RECORD OR TRANSMIT PILOT REPORTS	91
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	90
N454 PREPARE MET WATCH ADVISORIES	90
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	90
L344 ANALYZE UPPER AIR CHARTS	88
Q529 REVIEW "BUST REVIEWS"	87
N457 PREPARE SHORT RANGE WEATHER FORCASTS	87
N426 COMPLETE WEATHER BRIEFING CLEARANCE FORMS	85
N450 PREPARE BRIEFING CHARTS	85
N461 PROCESS FACSIMILE CHARTS FOR DISPLAY OR BRIEFINGS	84
N442 PERFORM WEATHER SUPPORT FOR AIRBORNE AIRCRAFT VIA RADIO	80
L355 EXTRACT INFORMATION FROM CLIMATOLOGICAL RECORDS	80
L341 ANALYZE SYNOPTIC SURFACE CHARTS	80
L345 ANALYZE UPPER LEVEL WINDS	79
L321 ANALYZE CLOUD COVER CHARTS	79
N424 BRIEF COMMANDERS	79
Q525 POST CHARTS	79
N438 PERFORM BRIEFINGS FOR NONWEATHER PERSONNEL	78
N470 TRANSMIT CODED WEATHER INFORMATION	78
N460 PREPARE TRANSPARENCIES FOR BRIEFINGS	77

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
SUPERVISORS (GRP176, N=139)

TASK	PERCENT MEMBERS PERFORMING
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	95
L323 ANALYZE FACSIMILE PRODUCTS	95
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	94
A10 DEVELOP WORK METHODS OR PROCEDURES	94
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	94
B75 WRITE CORRESPONDENCE	93
L338 ANALYZE SKEW T LOG P CHARTS	93
B56 INTERPRET POLICES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	92
C78 EVALUATE COMPLETED FORMS OR RECORDS	92
L330 ANALYZE LOCAL AREA CHARTS	92
C97 PREPARE APRs	91
D119 EVALUATE OJT TRAINEES	91
D109 COUNSEL TRAINEES ON TRAINING PROGRESS	91
A7 DETERMINE WORK PRIORITIES	91
N429 ENCODE WEATHER FORECASTS	91
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	91
N421 AMEND WEATHER FORECASTS	91
N427 DECODE WEATHER FORECASTS	90
A27 PLAN WORK ASSIGNMENTS	89
D112 DETERMINE PROFICIENCY OF AIRMEN PRIOR TO UPGRADING	89



REPRESENTATIVE TASKS PERFORMED BY  
DETACHMENT FORECASTERS (GRP269, N=372)

TASK	PERCENT MEMBERS PERFORMING
N422 BRIEF AIR CREWS	99
N420 AMEND OR CANCEL LOCAL WEATHER WARNINGS	99
N421 AMEND WEATHER FORECASTS	99
N427 DECODE WEATHER FORECASTS	98
N432 ISSUE LOCAL WEATHER WARNINGS	98
N429 ENCODE WEATHER FORECASTS	98
L330 ANALYZE LOCAL AREA CHARTS	97
N464 RECORD OR TRANSMIT PILOT REPORTS	97
N436 ISSUE WEATHER FORECASTS	96
L338 ANALYZE SKEW T LOG P CHARTS	96
L323 ANALYZE FACSIMILE PRODUCTS	94
N454 PREPARE MET WATCH ADVISORIES	94
Q529 REVIEW "BUST REVIEWS"	93
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	92
L344 ANALYZE UPPER AIR CHARTS	92
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	92
N457 PREPARE SHORT RANGE WEATHER FORECASTS	91
N426 COMPLETE WEATHER BRIEFING CLEARANCE FORMS	88
N442 PERFORM WEATHER SUPPORT FOR AIRBORNE AIRCRAFT VIA RADIO	87
L341 ANALYZE SYNOPTIC SURFACE CHARTS	86
N450 PREPARE BRIEFING CHARTS	86

REPRESENTATIVE TASKS PERFORMED BY UNIT STAFF  
WEATHER BRIEFERS (GRP267, N=18)

TASK	PERCENT MEMBERS PERFORMING
L330 ANALYZE LOCAL AREA CHARTS	100
N461 PROCESS FACSIMILE CHARTS FOR DISPLAY OR BRIEFINGS	100
N438 PERFORM BRIEFINGS FOR NONWEATHER PERSONNEL	100
N436 ISSUE WEATHER FORECASTS	100
L323 ANALYZE FACSIMILE PRODUCTS	100
L338 ANALYZE SKEW T LOG P CHARTS	100
N429 ENCODE WEATHER FORECASTS	100
N450 PREPARE BRIEFING CHARTS	94
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	94
L341 ANALYZE SYNOPTIC SURFACE CHARTS	94
N424 BRIEF COMMANDERS	94
L344 ANALYZE UPPER AIR CHARTS	94
N457 PREPARE SHORT RANGE WEATHER FORECASTS	94
N427 DECODE WEATHER FORECASTS	94
L321 ANALYZE CLOUD COVER CHARTS	94
N425 BRIEF SPECIAL MISSION PERSONNEL	89
L325 ANALYZE GEOGRAPHICAL FEATURES FOR EFFECT ON WEATHER	89
N448 PERFORM WEATHER SUPPORT FOR SPECIAL OPERATIONS	83
A19 PLAN BRIEFINGS	83
N454 PREPARE MET WATCH ADVISORIES	83
N423 BRIEF ALERT COMMAND POST DUTY OFFICER	78

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
INFORMATION FORECASTERS (GRP124, N=24)

TASK	PERCENT MEMBERS PERFORMING
N422 BRIEF AIR CREWS	100
N427 DECODE WEATHER FORECASTS	96
N420 AMEND OR CANCEL LOCAL WEATHER WARNINGS	92
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	92
N454 PREPARE MET WATCH ADVISORIES	88
N426 COMPLETE WEATHER BRIEFING CLEARANCE FORMS	83
N432 ISSUE LOCAL WEATHER WARNINGS	83
N421 AMEND WEATHER FORECASTS	83
Q529 REVIEW "BUST REVIEWS"	79
N429 ENCODE WEATHER FORECASTS	75
N464 RECORD OR TRANSMIT PILOT REPORTS	75
N436 ISSUE WEATHER FORECASTS	71
N442 PERFORM WEATHER SUPPORT FOR AIRBORNE AIRCRAFT VIA RADIO	67
P495 PERFORM PILOT-TO-METRO SERVICE (PMSV) RADIO CHECKS	67
L330 ANALYZE LOCAL AREA CHARTS	67
L338 ANALYZE SKEW T LOG P CHARTS	62
N461 PROCESS FACSIMILE CHARTS FOR DISPLAY OR BRIEFINGS	62
N458 PREPARE TELEPHONE RECORDINGS OF LOCAL FORECAST	54
N460 PREPARE TRANSPARENCIES FOR BRIEFINGS	54
N470 TRANSMIT CODED WEATHER INFORMATION	50



REPRESENTATIVE TASKS PERFORMED BY AFGWC  
FORECASTERS (GRP116, N=70)

TASK	PERCENT MEMBERS PERFORMING
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	91
L344 ANALYZE UPPER AIR CHARTS	90
L341 ANALYZE SYNOPTIC SURFACE CHARTS	83
L323 ANALYZE FACSIMILE PRODUCTS	81
L337 ANALYZE SATELLITE SENSED DATA	80
L346 ANALYZE VORTICITY CHARTS	79
L345 ANALYZE UPPER LEVEL WINDS	73
L321 ANALYZE CLOUD COVER CHARTS	71
N436 ISSUE WEATHER FORECASTS	66
L330 ANALYZE LOCAL AREA CHARTS	64
L325 ANALYZE GEOGRAPHICAL FEATURES FOR EFFECT ON WEATHER	64
L328 ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	63
L332 ANALYZE MOISTURE CHARTS	61
N421 AMEND WEATHER FORECASTS	59
L354 DETERMINE IF REPORTED DATA IS REPRESENTATIVE OF WEATHER SYSTEMS	59
N429 ENCODE WEATHER FORECASTS	56
L333 ANALYZE PHYSICAL CHARACTERISTICS OF AIR MASSES	56
N448 PERFORM WEATHER SUPPORT FOR SPECIAL OPERATIONS	54
L335 ANALYZE RADIO SOUND OBSERVATIONS (RAOBS)	53
N427 DECODE WEATHER FORECASTS	51
L329 ANALYZE JET STREAM CHARTS	50
L339 ANALYZE STABILITY CHARTS	50
N457 PREPARE SHORT RANGE WEATHER FORECASTS	49
L320 ANALYZE AIRCRAFT REPORTS (AIREPS)	49
Q500 FILE CHARTS	49
L334 ANALYZE RADAR CHARTS	46
L338 ANALYZE SKEW T LOG P CHARTS	46
L342 ANALYZE TEMPERATURE CHARTS	43
L340 ANALYZE STREAMLINE CHART	43
L357 PREPARE CLOUD COVER CHARTS	41

REPRESENTATIVE TASKS PERFORMED BY SEVERE  
WEATHER ANALYSTS (GRP225, N=18)

TASK	PERCENT MEMBERS PERFORMING
L344 ANALYZE UPPER AIR CHARTS	100
L346 ANALYZE VORTICITY CHARTS	100
L345 ANALYZE UPPER LEVEL WINDS	100
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	100
L334 ANALYZE RADAR CHARTS	94
L332 ANALYZE MOISTURE CHARTS	89
L341 ANALYZE SYNOPTIC SURFACE CHARTS	89
L342 ANALYZE TEMPERATURE CHARTS	89
L339 ANALYZE STABILITY CHARTS	89
L329 ANALYZE JET STREAM CHARTS	89
L335 ANALYZE RADIO SOUND OBSERVATIONS (RAOBS)	89
L337 ANALYZE SATELLITE SENSED DATA	83
L330 ANALYZE LOCAL AREA CHARTS	83
L333 ANALYZE PHYSICAL CHARACTERISTICS OF AIR MASSES	83
L323 ANALYZE FACSIMILE PRODUCTS	72
L358 PRODUCE FACSIMILE PRODUCTS	67
L351 DETERMINE CAUSES OF ABNORMAL WEATHER SYSTEM MOVEMENT	67
0481 PREPARE SEVERE WEATHER ADVISORIES	61
0482 PREPARE SEVERE WEATHER POINT WARNINGS	56
L325 ANALYZE GEOGRAPHICAL FEATURES FOR EFFECT ON WEATHER	56

REPRESENTATIVE TASKS PERFORMED BY TERMINAL  
AERODROME FORECASTERS (GRP223, N=29)

TASK	PERCENT MEMBERS PERFORMING
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	100
N421 AMEND WEATHER FORECASTS	93
L337 ANALYZE SATELLITE SENSED DATA	93
L321 ANALYZE CLOUD COVER CHARTS	93
N436 ISSUE WEATHER FORECASTS	90
L341 ANALYZE SYNOPTIC SURFACE CHARTS	90
N429 ENCODE WEATHER FORECASTS	86
L344 ANALYZE UPPER AIR CHARTS	86
L323 ANALYZE FACSIMILE PRODUCTS	79
O477 PREPARE CENTRALIZED TERMINAL FORECASTS	76
L346 ANALYZE VORTICITY CHARTS	76
L325 ANALYZE GEOGRAPHICAL FEATURES FOR EFFECT ON WEATHER	72
L328 ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	72
N457 PREPARE SHORT RANGE WEATHER FORECASTS	69
N427 DECODE WEATHER FORECASTS	69
N448 PERFORM WEATHER SUPPORT FOR SPECIAL OPERATIONS	66
L332 ANALYZE MOISTURE CHARTS	66
L354 DETERMINE IF REPORTED DATA IS REPRESENTATIVE OF WEATHER SYSTEMS	66
L330 ANALYZE LOCAL AREA CHARTS	59
L345 ANALYZE UPPER LEVEL WINDS	59
L357 PREPARE CLOUD COVER CHARTS	52



REPRESENTATIVE TASKS PERFORMED BY WEATHER  
CENTRAL FORECASTERS (GRP172, N=11)

TASK	PERCENT MEMBERS PERFORMING
L344 ANALYZE UPPER AIR CHARTS	100
L323 ANALYZE FACSIMILE PRODUCTS	100
L345 ANALYZE UPPER LEVEL WINDS	91
L341 ANALYZE SYNOPTIC SURFACE CHARTS	91
L330 ANALYZE LOCAL AREA CHARTS	91
N438 PERFORM BRIEFINGS FOR NONWEATHER PERSONNEL	82
L328 ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	82
N436 ISSUE WEATHER FORECASTS	82
N450 PREPARE BRIEFING CHARTS	82
N460 PREPARE TRANSPARENCIES FOR BRIEFINGS	82
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	73
Q525 POST CHARTS	73
Q532 PREPARE DAILY WEATHER MAPS	73
L338 ANALYZE SKEW T LOG P CHARTS	73
N457 PREPARE SHORT RANGE WEATHER FORECASTS	73
N427 DECODE WEATHER FORECASTS	64
L321 ANALYZE CLOUD COVER CHARTS	64
L325 ANALYZE GEOGRAPHICAL FEATURES FOR EFFECT ON WEATHER	64
L333 ANALYZE PHYSICAL CHARACTERISTICS OF AIR MASSES	64
N429 ENCODE WEATHER FORECASTS	64

**REPRESENTATIVE TASKS PERFORMED BY CHART  
FABRICATION PERSONNEL (GRP130, N=11)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING</b>
O478 PREPARE MASTER FACSIMILE CHARTS	91
L346 ANALYZE VORTICITY CHARTS	91
L358 PRODUCE FACSIMILE PRODUCTS	82
L337 ANALYZE SATELLITE SENSED DATA	82
L323 ANALYZE FACSIMILE PRODUCTS	82
L320 ANALYZE AIRCRAFT REPORTS (AIREPS)	82
L344 ANALYZE UPPER AIR CHARTS	73
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	73
B71 SUPERVISE WEATHER SPECIALISTS (AFSC 25150)	73
N448 PERFORM WEATHER SUPPORT FOR SPECIAL OPERATIONS	73
D105 CONDUCT OJT	73
C97 PREPARE APRs	73
L325 ANALYZE GEOGRAPHICAL FEATURES FOR EFFECT ON WEATHER	64
N468 REPRODUCE WEATHER CHARTS	64
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	64
L357 PREPARE CLOUD COVER CHARTS	55
L338 ANALYZE SKEW T LOG P CHARTS	55
L328 ANALYZE HORIZONTAL WEATHER DEPICTION CHARTS	55
L321 ANALYZE CLOUD COVER CHARTS	55
O471 CHECK ACCURACY OF WEATHER FORECASTS REANALYZED BY THE COMPUTER	55
N444 PERFORM WEATHER SUPPORT FOR DOD UNITS	55
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	55

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
INSTRUCTORS (GRP060, N=14)

TASK	PERCENT MEMBERS PERFORMING
D106 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	93
D130 SCORE TESTS	93
G228 ADJUST CONTROLS TO DETERMINE INTENSITY OF ECHOES	93
G229 ADJUST RANGE STROBE TO DETERMINE DISTANCE	93
G230 DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENT	93
G231 DETERMINE TOPS OF ECHOES	93
G232 MAINTAIN RADAR SURVEILLANCE	93
G235 PERFORM TURN-OFF PROCEDURES	93
G236 PERFORM TURN-ON PROCEDURES	93
D102 ADMINISTER TESTS	86
D127 PREPARE LESSON PLANS	86
D131 WRITE TEST QUESTIONS	86
D109 COUNSEL TRAINEES ON TRAINING PROGRESS	79
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	79
D120 EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	79
D129 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	79
D121 EVALUATE TRAINING METHODS OR TECHNIQUES	71
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	64
L344 ANALYZE UPPER AIR CHARTS	64
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	64



REPRESENTATIVE TASKS PERFORMED BY WEATHER  
OBSERVERS (GRP082, N=766)

TASK	PERCENT MEMBERS PERFORMING
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	99
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	99
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	99
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	99
E154 DETERMINE PREVAILING VISIBILITY VALUES	99
E173 MEASURE PRECIPITATION	99
E146 DETERMINE ALTIMETER SETTINGS	98
E156 DETERMINE STATION PRESSURE	98
E150 DETERMINE DEW POINT	98
E137 BRIEF RELIEF OBSERVERS	96
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	96
E147 DETERMINE BAROMETRIC PRESSURE	96
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	95
F210 CHECK ACCURACY OF CLOCK	93
E159 DETERMINE VERTICAL VISIBILITY	93
E187 READ DRY AND WET BULB TEMPERATURES	93
E166 FILE TELETYPE MESSAGES	92
F208 CHANGE PRINTER RIBBONS	92
F222 REPLACE TELETYPE PAPER	92
E135 ANNOTATE RECORDING INSTRUMENT CHARTS	92
F224 REPLACE WIND RECORDER CHARTS	91
E153 DETERMINE PRESSURE ALTITUDE OR DENSITY ALTITUDE	90
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	90
E198 TEAR MAPS FROM FACSIMILE PRINTER	90
E160 ENCODE MESSAGES	89
F218 REPLACE FACSIMILE PAPER	89
E164 FILE PLOTTED MAPS OR CHARTS	88
E148 DETERMINE CLOUD LAYER HEIGHTS FROM PILOT REPORTS (PIREPS)	88
E189 READ PRESSURE RECORDING INSTRUMENTS	88
F209 CHECK ACCURACY OF ANEROID BAROMETERS	87

REPRESENTATIVE TASKS PERFORMED BY SENIOR  
WEATHER OBSERVERS (GRP382, N=34)

TASK	PERCENT MEMBERS PERFORMING
E154 DETERMINE PREVAILING VISIBILITY VALUES	100
E146 DETERMINE ALTIMETER SETTINGS	100
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	100
E147 DETERMINE BAROMETRIC PRESSURE	100
E156 DETERMINE STATION PRESSURE	100
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	100
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	100
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	100
E159 DETERMINE VERTICAL VISIBILITY	100
F210 CHECK ACCURACY OF CLOCK	100
F225 REPLENISH INK SUPPLY IN RECORDING INSTRUMENTS	100
E141 COMPLETE AWS FORM 10	97
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	97
E189 READ PRESSURE RECORDING INSTRUMENTS	97
E145 DECODE TELETYPE MESSAGES	97
B55 INITIATE REQUESTS FOR SUPPLIES OR EQUIPMENT	82
C78 EVALUATE COMPLETED FORMS OR RECORDS	79
B75 WRITE CORRESPONDENCE	74
D105 CONDUCT OJT	71
D119 EVALUATE OJT TRAINEES	65
B69 SUPERVISE APPRENTICE WEATHER SPECIALISTS (AFSC 75130)	59

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
STATION OBSERVERS (GRP319, N=674)

TASK	PERCENT MEMBERS PERFORMING
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	100
E154 DETERMINE PREVAILING VISIBILITY VALUES	100
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	100
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	99
E173 MEASURE PRECIPITATION	99
E146 DETERMINE ALTIMETER SETTINGS	99
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	99
E156 DETERMINE STATION PRESSURE	99
E150 DETERMINE DEW POINT	99
E147 DETERMINE BAROMETRIC PRESSURE	98
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	98
E137 BRIEF RELIEF OBSERVERS	98
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	96
F210 CHECK ACCURACY OF CLOCK	96
E135 ANNOTATE RECORDING INSTRUMENT CHARTS	95
E166 FILE TELETYPE MESSAGES	94
F224 REPLACE WIND RECORDER CHARTS	94
E159 DETERMINE VERTICAL VISIBILITY	94
E198 TEAR MAPS FROM FACSIMILE PRINTER	94
F208 CHANGE PRINTER RIBBONS	93
E187 READ DRY AND WET BULB TEMPERATURES	93
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	93
F222 REPLACE TELETYPE PAPER	93
F218 REPLACE FACSIMILE PAPER	92
E153 DETERMINE PRESSURE ALTITUDE OR DENSITY ALTITUDE	92
E164 FILE PLOTTED MAPS OR CHARTS	92



REPRESENTATIVE TASKS PERFORMED BY ORGANIC  
WEATHER TEAM MEMBERS (GRP398, N=16)

TASK	PERCENT MEMBERS PERFORMING
E154 DETERMINE PREVAILING VISIBILITY VALUES	100
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	100
E150 DETERMINE DEW POINT	100
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	100
E146 DETERMINE ALTIMETER SETTINGS	100
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	100
E156 DETERMINE STATION PRESSURE	100
E173 MEASURE PRECIPITATION	100
E137 BRIEF RELIEF OBSERVERS	100
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	94
E186 PREPARE TELETYPE TAPES	94
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	94
F222 REPLACE TELETYPE PAPER	94
E202 TRANSMIT RTD REPORTS	94
E142 COMPLETE METEOROLOGICAL AIRWAYS REPORT (METAR) FORMS (AWS FORM 10A)	88
E162 ESTIMATE HEIGHT OF CLOUD LAYERS USING KNOWN LANDMARKS	88
E166 FILE TELETYPE MESSAGES	88
E159 DETERMINE VERTICAL VISIBILITY	88
E177 OBTAIN PILOT REPORTS (PIREPS) FROM TRAFFIC CONTROLLERS	88
E171 MEASURE HEIGHT OF CLOUD LAYER USING BALLOON	88
E144 COORDINATE WEATHER INFORMATION WITH AIR TRAFFIC CONTROLLERS	75

**REPRESENTATIVE TASKS PERFORMED BY RANGE  
OBSERVERS (GRP283, N=14)**

<b>TASK</b>	<b>PERCENT MEMBERS PERFORMING</b>
H253 INFLATE BALLOONS WITH HELIUM	100
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	100
H255 MOUNT AND LEVEL THEODOLITES	100
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	100
E150 DETERMINE DEW POINT	100
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	100
H239 ASSEMBLE AND TEST PILOT BALLOONS (PIBAL)	93
H244 CALCULATE WIND SPEED FOR EACH MINUTE ABOVE SURFACE	93
E187 READ DRY AND WET BULB TEMPERATURES	93
E154 DETERMINE PREVAILING VISIBILITY VALUES	93
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	93
E173 MEASURE PRECIPITATION	93
E156 DETERMINE STATION PRESSURE	93
H282 VISUALLY TRACK PIBAL	86
H252 HANDLE OR STORE COMPRESSED GAS CYLINDERS	86
H257 OBTAIN BALLOON RELEASE CLEARANCE	86
E146 DETERMINE ALTIMETER SETTINGS	86
E160 ENCODE MESSAGES	86
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	86
F213 PERFORM SAFETY CHECKS	86
E159 DETERMINE VERTICAL VISIBILITY	86
E147 DETERMINE BAROMETRIC PRESSURE	86
E137 BRIEF RELIEF OBSERVERS	86
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	86
H278 TAKE SINGLE THEODOLITE OBSERVATIONS	79
H261 PERFORM FIXED POINT ORIENTATION OF THEODOLITE	79
E171 MEASURE HEIGHT OF CLOUD LAYER USING BALLOON	79

REPRESENTATIVE TASKS PERFORMED BY FORECASTER  
SUPPORT PERSONNEL (GRP070, N=99)

TASK	PERCENT MEMBERS PERFORMING
Q500 FILE CHARTS	92
F222 REPLACE TELETYPE PAPER	89
E166 FILE TELETYPE MESSAGES	83
Q525 POST CHARTS	82
E198 TEAR MAPS FROM FACSIMILE PRINTER	81
F208 CHANGE PRINTER RIBBONS	81
F218 REPLACE FACSIMILE PAPER	80
E137 BRIEF RELIEF OBSERVERS	79
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	70
Q501 FILE SATELLITE MAPS	62
Q503 MAKE ENTRIES IN OBSERVERS LOGS	62
Q519 PLOT SKEW T CHARTS	61
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	59
Q498 DISTRIBUTE TELETYPE MESSAGES	54
Q516 PLOT RADAR REPORTS	53
E145 DECODE TELETYPE MESSAGES	53
Q528 POST SATELLITE MAPS	53
F221 REPLACE TELAUTOWRITER PAPER	48
Q526 POST LOCAL WEATHER INFORMATION	41
Q506 PLOT AIRWAYS CODES	41
Q520 PLOT SYNOPTIC CODES	40



REPRESENTATIVE TASKS PERFORMED BY UNIT SUPPORT  
PERSONNEL (GRP219, N=46)

TASK	PERCENT MEMBERS PERFORMING
F222 REPLACE TELETYPE PAPER	100
E166 FILE TELETYPE MESSAGES	98
E198 TEAR MAPS FROM FACSIMILE PRINTER	93
F218 REPLACE FACSIMILE PAPER	93
E137 BRIEF RELIEF OBSERVERS	89
Q525 POST CHARTS	87
E164 FILE PLOTTED MAPS OR CHARTS	87
F208 CHANGE PRINTER RIBBONS	87
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	80
Q503 MAKE ENTRIES IN OBSERVER LOGS	76
Q528 POST SATELLITE MAPS	72
Q519 PLOT SKEW T CHARTS	67
F221 REPLACE TELAUTOWRITER PAPER	67
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	63
E145 DECODE TELETYPE MESSAGES	63
Q526 POST LOCAL WEATHER INFORMATION	61
F225 REPLENISH INK SUPPLY IN RECORDING INSTRUMENTS	57
Q498 DISTRIBUTE TELETYPE MESSAGES	52

REPRESENTATIVE TASKS PERFORMED BY RADAR  
SUPPORT OBSERVERS (GRP236, N=16)

TASK	PERCENT MEMBERS PERFORMING
Q525 POST CHARTS	100
Q519 PLOT SKEW T CHARTS	100
E166 FILE TELETYPE MESSAGES	100
E164 FILE PLOTTED MAPS OR CHARTS	100
F208 CHANGE PRINTER RIBBONS	100
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	94
E137 BRIEF RELIEF OBSERVERS	94
E198 TEAR MAPS FROM FACSIMILE PRINTER	88
G231 DETERMINE TOPS OF ECHOES	88
G230 DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENT	88
F218 REPLACE FACSIMILE PAPER	88
G232 MAINTAIN RADAR SURVEILLANCE	81
G229 ADJUST RANGE STROBE TO DETERMINE DISTANCE	75
E181 PREPARE CONUS METEOROLOGICAL DATA SYSTEM (COMEDS) MESSAGES	75
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	75
F221 REPLACE TELAUTOWRITER PAPER	75
G228 ADJUST CONTROLS TO DETERMINE INTENSITY OF ECHOES	69
F222 REPLACE TELETYPE PAPER	69
G233 PERFORM DAILY OPERATIONAL CHECKS	69

REPRESENTATIVE TASKS PERFORMED BY AFGWC  
SUPPORT PERSONNEL (GRP168, N=18)

TASK	PERCENT MEMBERS PERFORMING
Q504 PLOT ACTIVITY CHARTS	94
Q516 PLOT RADAR REPORTS	89
F222 REPLACE TELETYPE PAPER	89
Q500 FILE CHARTS	83
F208 CHANGE PRINTER RIBBONS	67
E198 TEAR MAPS FROM FACSIMILE PRINTER	56
Q525 POST CHARTS	56
E137 BRIEF RELIEF OBSERVERS	56
N468 REPRODUCE WEATHER CHARTS	50
Q503 MAKE ENTRIES IN OBSERVER LOGS	50
F218 REPLACE FACSIMILE PAPER	44
E166 FILE TELETYPE MESSAGES	39
E145 DECODE TELETYPE MESSAGES	39
Q506 PLOT AIRWAYS CODES	39
Q498 DISTRIBUTE TELETYPE MESSAGES	39



REPRESENTATIVE TASKS PERFORMED BY RAWINSONDE  
OPERATORS (GRP145, N=34)

TASK	PERCENT MEMBERS PERFORMING
H252 HANDLE OR STORE COMPRESSED GAS CYLINDERS	100
H254 LAUNCH FLIGHT EQUIPMENT	97
H241 ASSEMBLE FLIGHT TRAINS	97
H258 OPERATE RAWIN SET MAIN ASSEMBLY EQUIPMENT AT RELEASE	97
H277 TAKE RELEASE OBSERVATIONS	97
F215 PREFLIGHT RAWINSONDE (RAWIN) SET CONTROL RECORDERS	97
H257 OBTAIN BALLOON RELEASE CLEARANCE	97
H281 VERIFY UPPER AIR DATA	94
H280 VERIFY PRESSURE CALIBRATION CHART SERIAL NUMBERS	94
H240 ASSEMBLE AND TEST RAWINSONDE (RAWIN) BALLOON EQUIPMENT	91
H246 COMPUTE RAWIN HEIGHTS	91
F220 REPLACE PAPER ON TMQ-5	91
H264 PERFORM PRESSURE CONTACT SETTING PROCEDURES	88
F214 PREFLIGHT METEOROLOGICAL RECORDER TMQ-5	88
H248 ENCODE RADIOSONDE (RAOB) DATA	88
H244 CALCULATE WIND SPEED FOR EACH MINUTE ABOVE SURFACE	88
F217 REPLACE CHART ROLLS IN RAWINSONDE CONTROL RECORDERS	88
H268 SELECT AND EVALUATE RECORDER RECORDS	85
H272 SET UP BASELINE FOR RADIOSONDE	85
H262 PERFORM INSTRUMENT PREFLIGHT CHECKS	82
H253 INFLATE BALLOONS WITH HELIUM	82
H251 EVALUATE UPPER AIR DATA	82
E187 READ DRY AND WET BULB TEMPERATURES	82

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
MANAGERS (GRP065, N=72)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	93
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	86
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	86
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	86
B33 ATTEND CONFERENCES OR POLICY MEETINGS	86
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	85
B40 DIRECT COMPLIANCE WITH OPERATIONAL DIRECTIVES	82
A7 DETERMINE WORK PRIORITIES	82
C78 EVALUATE COMPLETED FORMS OR RECORDS	72
A10 DEVELOP WORK METHODS OR PROCEDURES	69
B55 INITIATE REQUESTS FOR SUPPLIES OR EQUIPMENT	69
C94 EVALUATE WORK SCHEDULES	65
A27 PLAN WORK ASSIGNMENTS	65
A11 DEVELOP WORKING AGREEMENTS WITH USING, MAINTENANCE, OR COMMUNICATIONS ORGANIZATIONS	65
A5 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	65
C97 PREPARE APRs	64
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	64
A4 DETERMINE PUBLICATION REQUIREMENTS	64
A15 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	61
B36 CONDUCT SUPERVISORY ORIENTATION OF NEWLY ASSIGNED PERSONNEL	61

REPRESENTATIVE TASKS PERFORMED BY TECHNICAL  
ADVISORS (GRP417, N=13)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	100
D116 DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	100
D115 DIRECT OR IMPLEMENT OJT PROGRAMS	100
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	100
D110 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
B55 INITIATE REQUESTS FOR SUPPLIES OR EQUIPMENT	100
B33 ATTEND CONFERENCES OR POLICY MEETINGS	100
B62 PREPARE INSPECTION REPORTS	100
B46 DIRECT MAINTENANCE OF TECHNICAL LIBRARY	100
B57 INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	100
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	92
D122 INSTRUCT PERSONNEL ON CHANGES IN METHODS OR PROCEDURES	92
C82 EVALUATE INSPECTION REPORTS OR PROCEDURES	92
D119 EVALUATE OJT TRAINEES	92
B40 DIRECT COMPLIANCE WITH OPERATIONAL DIRECTIVES	92
B44 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	92
C78 EVALUATE COMPLETED FORMS OR RECORDS	92
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	92
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	92
A7 DETERMINE WORK PRIORITIES	92
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	92
A18 PLAN ADMINISTRATIVE INSPECTIONS	92
B53 INITIATE PERSONNEL ACTION REQUESTS	92
A5 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	92



REPRESENTATIVE TASKS PERFORMED BY WEATHER  
STATION MANAGERS (GRP389, N=12)

TASK	PERCENT MEMBERS PERFORMING
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	100
C97 PREPARE APRs	100
C94 EVALUATE WORK SCHEDULES	100
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	100
A28 PREPARE FORECAST QUALITY CONTROL PROGRAM	100
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
A27 PLAN WORK ASSIGNMENTS	100
A15 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	100
A17 ESTABLISH WEATHER FORECASTING SCHEDULES	100
D103 ASSIGN ON-THE-JOB (OJT) TRAINERS	100
B43 DIRECT FILING OR DISPOSITION OF WEATHER RECORDS	100
B36 CONDUCT SUPERVISORY ORIENTATION OF NEWLY ASSIGNED PERSONNEL	100
B74 SUPERVISE WEATHER TECHNICIANS (AFSC 25170)	92
B75 WRITE CORRESPONDENCE	92
B71 SUPERVISE WEATHER SPECIALISTS (AFSC 25150)	92
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	92
A10 DEVELOP WORK METHODS OR PROCEDURES	92
A29 PREPARE FORECAST VERIFICATION PROGRAM	92
A7 DETERMINE WORK PRIORITIES	92
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	92
D111 DETERMINE OJT TRAINING REQUIREMENTS	92

REPRESENTATIVE TASKS PERFORMED BY DETACHMENT  
COMMANDERS (GRP270, N=9)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	100
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	100
A5 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	100
C97 PREPARE APRs	100
A15 ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	100
C77 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	100
A4 DETERMINE PUBLICATION REQUIREMENTS	100
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	89
B33 ATTEND CONFERENCES OR POLICY MEETINGS	89
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	89
C85 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	89
C81 EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	89
A2 ASSIGN SPONSORS FOR NEWLY ASSIGNED PERSONNEL	89
A1 ASSIGN PERSONNEL TO DUTY POSITIONS	89
A12 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	89
B44 DIRECT MAINTENANCE OF ADMINISTRATIVE FILES	89
B34 CONDUCT CAREER COUNSELING FOR SUBORDINATES	78
A11 DEVELOP WORKING AGREEMENTS WITH USING, MAINTENANCE, OR COMMUNICATIONS ORGANIZATIONS	78
C82 EVALUATE INSPECTION REPORTS OR PROCEDURES	78
C95 INDORSE AIRMAN PERFORMANCE REPORTS (APR)	78

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
OPERATIONS SUPERINTENDENTS (GRP197, N=12)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	100
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	100
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	100
B33 ATTEND CONFERENCES OR POLICY MEETINGS	100
B40 DIRECT COMPLIANCE WITH OPERATIONAL DIRECTIVES	92
B62 PREPARE INSPECTION REPORTS	92
C101 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	83
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	83
A7 DETERMINE WORK PRIORITIES	83
A4 DETERMINE PUBLICATION REQUIREMENTS	83
C93 EVALUATE WEATHER SUPPORT REQUIREMENTS	75
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	75
C78 EVALUATE COMPLETED FORMS OR RECORDS	75
B48 DRAFT RECOMMENDED CHANGES TO AIR WEATHER SERVICE (AWS) MANUALS	75
C90 EVALUATE SUGGESTIONS	67
B34 CONDUCT CAREER COUNSELING FOR SUBORDINATES	67
A5 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	58
C82 EVALUATE INSPECTION REPORTS OR PROCEDURES	58
C98 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	58
D111 DETERMINE OJT TRAINING REQUIREMENTS	58



REPRESENTATIVE TASKS PERFORMED BY STAFF  
OPERATIONS PERSONNEL (GRP157, N=6)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	100
B33 ATTEND CONFERENCES OR POLICY MEETINGS	100
B48 DRAFT RECOMMENDED CHANGES TO AIR WEATHER SERVICE (AWS) MANUALS	83
C101 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	67
A12 DRAFT BUDGET OR FINANCIAL REQUIREMENTS	67
C90 EVALUATE SUGGESTIONS	67
A11 DEVELOP WORKING AGREEMENTS WITH USING, MAINTENANCE, OR COMMUNICATIONS ORGANIZATIONS	50

REPRESENTATIVE TASKS PERFORMED BY SOLAR  
FORECASTERS (GRP025, N=23)

TASK	PERCENT MEMBERS PERFORMING
R593 SEND CUSTOMER EVENT NOTIFICATIONS	74
F222 REPLACE TELETYPE PAPER	57
R548 INTERPRET AND RECORD DATA FROM POLARIMETERS	48
R569 PERFORM WHITE LIGHT ANALYSIS	48
R549 INTERPRET AND RECORD DATA FROM SHORT WAVE (SW) FADE MONITORS	48
R557 PERFORM CALIBRATION CHECKS (CALCHECK)	48
F208 CHANGE PRINTER RIBBONS	48
R547 INTERPRET AND RECORD DATA FROM FIXED FREQUENCY RADIOMETERS	43
R538 ANALYZE RADIO BURST SPECTRUM DATA	43
R559 PERFORM FLARE OCCURRENCE (OPTICAL) PROCEDURES	43
R568 PERFORM TURN-ON (OPTICAL) PROCEDURES	43
R567 PERFORM SUN ACQUISITION (OPTICAL) PROCEDURES	43
R566 PERFORM PRESUNRISE (OPTICAL) PROCEDURES	43
R592 PROCESS PHOTOGRAPHIC PRINTS	43
R563 PERFORM INSTRUMENT CALIBRATIONS (ICAL)	43
R585 PREPARE SHORTWAVE (SW) EVENT WARNING REPORTS	43
R558 PERFORM END-OF-DAY (OPTICAL) PROCEDURES	43
R551 LOAD ACME CAMERAS	43
R556 OPERATE TEKTRONIC HARD COPIERS	43

REPRESENTATIVE TASKS PERFORMED BY ASTROGEOPHYSICAL  
RADIO DATA ANALYSTS (GRP222, N=5)

TASK	PERCENT MEMBERS PERFORMING
R548 INTERPRET AND RECORD DATA FROM POLARIMETERS	100
E160 ENCODE MESSAGES	100
R547 INTERPRET AND RECORD DATA FROM FIXED FREQUENCY RADIOMETERS	100
R549 INTERPRET AND RECORD DATA FROM SHORT WAVE (SW) FADE MONITORS	100
R543 CALIBRATE FIXED FREQUENCY RADIOMETER	100
F212 MAKE ADJUSTMENTS OF EQUIPMENT AS INSTRUCTED BY MAINTENANCE PERSONNEL	100
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	100
E186 PREPARE TELETYPE TAPES	80
E185 PREPARE TELETYPE REPORTS	80
R570 POSITION ANTENNAS	80
E145 DECODE TELETYPE MESSAGES	80
R583 PREPARE RADIO BURST EVENT WARNING REPORTS	80
R585 PREPARE SHORTWAVE (SW) EVENT WARNING REPORTS	80
F208 CHANGE PRINTER RIBBONS	80
E166 FILE TELETYPE MESSAGES	80
F225 REPLENISH INK SUPPLY IN RECORDING INSTRUMENTS	80
F222 REPLACE TELETYPE PAPER	80
R538 ANALYZE RADIO BURST SPECTRUM DATA	60
E135 ANNOTATE RECORDING INSTRUMENT CHARTS	60
R541 CALCULATE ASTRONOMICAL UNIT CORRECTION FACTORS	60



REPRESENTATIVE TASKS PERFORMED BY SPACE  
ENVIRONMENTAL FORECASTERS (GRP154, N=5)

TASK	PERCENT MEMBERS PERFORMING
R588 PREPARE 7-DAY AP FORECASTS	100
R593 SEND CUSTOMER EVENT NOTIFICATIONS	100
R586 PREPARE USAF/NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMIN- ISTRATION (NOAA) PRIMARY SOLAR AND GEOGRAPHICAL REPORT	100
R576 PREPARE GEOMAGNETIC DISTURBANCE EVENT WARNING REPORTS	100
R575 PREPARE FORECASTS OF 10 CM SOLAR FLUX	100
R573 PREPARE FLARE EVENT WARNING REPORTS	100
R587 PREPARE X-RAY EVENT WARNING REPORTS	100
R572 PREPARE EXTENDED PERIOD FORECASTS	100
R585 PREPARE SHORTWAVE (SW) EVENT WARNING REPORTS	100
R589 PREPARE 7-DAY OUTLOOK FORECASTS	100
R582 PREPARE PROTON EVENT WARNING REPORTS	100
R580 PREPARE POLAR CAP ABSORPTION (PCA) EVENT WARNING REPORTS	100
R581 PREPARE PRIMARY HIGH FREQUENCY (HF) RADIO PROPOGATION FORECASTS	80
R584 PREPARE SECONDARY HF RADIO PROPOGATION FORECASTS	80
R574 PREPARE FORECASTS OF TOTAL ELECTRON CONTENT	80
R538 ANALYZE RADIO BURST SPECTRUM DATA	80
R577 PREPARE HF RADIO PROPOGATION STUDIES	80
R583 PREPARE RADIO BURST EVENT WARNING REPORTS	80
R578 PREPARE MAXIMUM USABLE FREQUENCY/LOWEST USABLE FREQUENCY (MUF/LUF) PREDICTIONS	80
R537 ANALYZE AURORAL FILMS	80

REPRESENTATIVE TASKS PERFORMED BY SOLAR  
ASTROGEOPHYSICAL OBSERVERS (GRP212, N=9)

TASK	PERCENT MEMBERS PERFORMING
R560 PERFORM FLARE PATROL IN AUTOMATIC MODE	100
R569 PERFORM WHITE LIGHT ANALYSIS	100
R568 PERFORM TURN-ON (OPTICAL) PROCEDURES	100
R559 PERFORM FLARE OCCURRENCE (OPTICAL) PROCEDURES	100
R567 PERFORM SUN ACQUISITION (OPTICAL) PROCEDURES	100
R566 PERFORM PRESUNRISE (OPTICAL) PROCEDURES	100
R563 PERFORM INSTRUMENT CALIBRATIONS (ICAL)	100
R592 PROCESS PHOTOGRAPHIC PRINTS	100
R565 PERFORM IMAGE ROTATOR CHECKS	100
R558 PERFORM END-OF-DAY (OPTICAL) PROCEDURES	100
R564 PERFORM ICAL TAPE READ	100
R551 LOAD ACME CAMERAS	100
R557 PERFORM CALIBRATION CHECKS (CALCHECK)	100
R556 OPERATE TEKTRONIC HARD COPIERS	100
R593 SEND CUSTOMER EVENT NOTIFICATIONS	89
R590 PROCESS PHOTOGRAPHIC FILM USING AUTOMATIC PROCESSORS	89
R562 PERFORM FLARE PATROL IN SEMIAUTOMATIC MODE	89
R555 OPERATE SPECTROGRAPH/SPECTROHELISCOPES	89
R591 PROCESS PHOTOGRAPHIC FILM USING MANUAL PROCESSING	78
R546 CONDUCT TELESCOPE ALIGNMENT CHECKS	78
R561 PERFORM FLARE PATROL IN MANUAL MODE	78
R552 LOAD NIKON CAMERAS	78
R554 OPERATE NIKON CAMERAS	78

REPRESENTATIVE TASKS PERFORMED BY WEATHER  
EDITORS (GRP244, N=8)

TASK	PERCENT MEMBERS PERFORMING
K313 EDIT WEATHER DATA FROM INCOMING CIRCUITS	100
M406 REMOVE GARBLED DATA	100
M405 RELAY SPECIAL DATA REQUESTS	100
M404 REINSERT ROUTINE DELAYED WEATHER (RTD) REPORTS INTO COMPUTER SYSTEM	88
K312 DETERMINE AUTHENTICITY OF RADIO-INTERCEPT STATIONS	88
F222 REPLACE TELETYPE PAPER	88
K311 COMPILE ORIGINAL WEATHER MESSAGES	88
E166 FILE TELETYPE MESSAGES	75
F226 REPORT WEATHER COMPUTER MALFUNCTIONS	75
B42 DIRECT EDITING OF WEATHER REPORTS	63
K318 TRACE MISSING BULLETINS OR MESSAGES	63
K314 MAINTAIN LISTS OF CONTRIBUTING STATIONS	63
K315 MAINTAIN LISTS OF RADIO-INTERCEPT STATIONS	63
F227 SWITCH COMMUNICATIONS MACHINE ON-AND-OFF THE LINE	63



REPRESENTATIVE TASKS PERFORMED BY DATA INPUT  
SPECIALISTS (GRP266, N=5)

<u>TASK</u>	<u>PERCENT MEMBERS PERFORMING</u>
E137 BRIEF RELIEF OBSERVERS	100
F222 REPLACE TELETYPE PAPER	100
F208 CHANGE PRINTER RIBBONS	100
M386 KEYPUNCH CARDS	80
E166 FILE TELETYPE MESSAGES	80
Q525 POST CHARTS	60

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WEATHER CAREER LADDER, AFSC 251X0/A.(U)  
DEC 79

AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/9  
WEATHER CAREER LADDER, AFSC 251X0/A.(U)  
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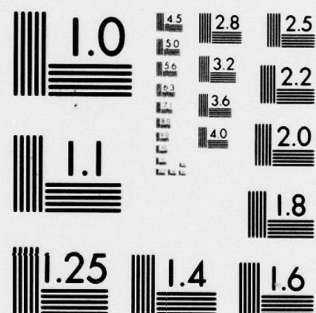
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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A



REPRESENTATIVE TASKS PERFORMED BY COMPUTER PROGRAMMING  
AND PROCESSING PERSONNEL (GRP067, N=61)

TASK	PERCENT MEMBERS PERFORMING
M386 KEYPUNCH CARDS	97
M359 ADD TO OR DELETE INFORMATION FROM EXISTING COMPUTER PROGRAMS	95
M396 PREPARE COMPUTER PROGRAM DOCUMENTATION AND COMMENTS	85
M361 ASSEMBLE WEATHER COMPUTER PROGRAMS	84
M376 DOCUMENT ALL PROGRAMS WRITTEN OR MODIFIED	84
M418 WRITE PROGRAMS IN FORTRAN LANGUAGE	79
M372 DESIGN AND DEVELOP WEATHER COMPUTER PROGRAMS	79
M370 CREATE PROGRAM TAPES FROM CARDS OR CARDS FROM TAPES	74
M395 PREPARE COMPUTER PROGRAM CONTENT	72
M402 READ MEMORY CORE DUMPS	72
M374 DETERMINE FLOW SEQUENCE OF COMPUTER PROGRAMS	70
M384 INSPECT CONDITION OF PUNCH CARDS	70
M388 MAINTAIN LISTS OF COMPUTER-BUILT PROGRAMS	64
M362 BUILD DATA BASE	61
M363 COMMUNICATE WITH DATA EXECUTIVE SYSTEMS	59
M378 EXAMINE ACCURACY OF PRODUCT FROM ON-LINE PRINTOUTS	56
M377 EVALUATE COMPUTER OUTPUT FOR METEOROLOGICAL ACCURACY	52
M365 COMPILE SUMMARIES OF OUTPUT DATA	51
M368 CORRECT COMPUTER DATA INPUT FORMATS	51

REPRESENTATIVE TASKS PERFORMED BY AUTOMATED  
SYSTEMS ANALYSTS (GRP284, N=44)

TASK	PERCENT MEMBERS PERFORMING
M359 ADD TO OR DELETE INFORMATION FROM EXISTING COMPUTER PROGRAMS	100
M376 DOCUMENT ALL PROGRAMS WRITTEN OR MODIFIED	98
M396 PREPARE COMPUTER PROGRAM DOCUMENTATION AND COMMENTS	95
M386 KEYPUNCH CARDS	95
M418 WRITE PROGRAMS IN FORTRAN LANGUAGE	91
M361 ASSEMBLE WEATHER COMPUTER PROGRAMS	91
M372 DESIGN AND DEVELOP WEATHER COMPUTER PROGRAMS	89
M402 READ MEMORY CORE DUMPS	86
M374 DETERMINE FLOW SEQUENCE OF COMPUTER PROGRAMS	84
M370 CREATE PROGRAM TAPES FROM CARDS OR CARDS FROM TAPES	82
M395 PREPARE COMPUTER PROGRAM CONTENT	80
M363 COMMUNICATE WITH DATA EXECUTIVE SYSTEMS	68
M388 MAINTAIN LISTS OF COMPUTER-BUILT PROGRAMS	68
M378 EXAMINE ACCURACY OF PRODUCT FROM ON-LINE PRINTOUTS	68
M384 INSPECT CONDITION OF PUNCH CARDS	68
M362 BUILD DATA BASE	64
M413 TEST OR IMPLEMENT REAL-TIME WEATHER COMPUTER PROGRAMS	59
M377 EVALUATE COMPUTER OUTPUT FOR METEOROLOGICAL ACCURACY	59
B33 ATTEND CONFERENCES OR POLICY MEETINGS	59
M416 WRITE PROGRAMS IN ASSEMBLY LANGUAGE	55

REPRESENTATIVE TASKS PERFORMED BY CENTER  
DATA BASE MONITORS (GRP108, N=5)

TASK	PERCENT MEMBERS PERFORMING
M386 KEYPUNCH CARDS	100
M362 BUILD DATA BASE	80
M365 COMPILE SUMMARIES OF OUTPUT DATA	80
M364 COMPILE SUMMARIES OF INPUT DATA	80
A10 DEVELOP WORK METHODS OR PROCEDURES	80
M405 RELAY SPECIAL DATA REQUESTS	80
M384 INSPECT CONDITION OF PUNCH CARDS	80
M383 INITIATE CORRECTIVE OR RECOVERY PROGRAMS	80
B75 WRITE CORRESPONDENCE	80
B33 ATTEND CONFERENCES OR POLICY MEETINGS	80
D110 DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	60
M407 RESEARCH OR IDENTIFY WEATHER INFORMATION FOR COMPUTER PROGRAMS	60
B39 DIRECT ASSEMBLY OF WEATHER HISTORICAL RECORDS	60
M359 ADD TO OR DELETE INFORMATION FROM EXISTING COMPUTER PROGRAMS	60
P492 PERFORM BUILDING SECURITY CHECKS	60



REPRESENTATIVE TASKS PERFORMED BY SPECIAL  
PROJECT FORECASTERS (GRP133, N=8)

TASK	PERCENT MEMBERS PERFORMING
N448 PERFORM WEATHER SUPPORT FOR SPECIAL OPERATIONS	100
L337 ANALYZE SATELLITE SENSED DATA	100
N436 ISSUE WEATHER FORECASTS	100
O472 COMPILE INFORMATION TO USE IN CARD DECKS	100
O483 PROCESS REQUESTS FOR SPECIAL WEATHER SUPPORT	88
N457 PREPARE SHORT RANGE WEATHER FORECASTS	88
M362 BUILD DATA BASE	88
O484 RECEIVE OR CATEGORIZE REQUESTS FOR SPECIAL WEATHER SUPPORT	88
M386 KEYPUNCH CARDS	88
M384 INSPECT CONDITION OF PUNCH CARDS	88
N427 DECODE WEATHER FORECASTS	88
M375 DETERMINE WEATHER FACTORS TO BE USED IN COMPUTER PROGRAMS	88

REPRESENTATIVE TASKS PERFORMED BY SATELLITE DATA  
ACQUISITION PERSONNEL (GRP199, N=9)

TASK	PERCENT MEMBERS PERFORMING
S596 OPERATE CEC RECORDERS	100
S594 CUT, NUMBER, AND DATE SATELLITE PICTURES	100
S599 PLOT ORBITAL PASS NUMBER, VEHICLE DESIGNATOR, AND TIME GROUP ON ACETATE	100
S597 OPERATE DEGAUSSING EQUIPMENT	100
S595 MONITOR PATCH PANELS	100
S598 OPERATE SATELLITE MONITORING SCOPES	89
S600 PLOT PROGRAMMED CENTER AND FIDUCIAL POINTS ON ACETATE	78
M384 INSPECT CONDITION OF PUNCH CARDS	56
M386 KEYPUNCH CARDS	56

REPRESENTATIVE TASKS PERFORMED BY DROPSONDE  
SYSTEMS OPERATORS (GRP246, N=12)

TASK	PERCENT MEMBERS PERFORMING
I291 PERFORM PREFLIGHT INSPECTIONS OF AIRCRAFT	100
I284 COMPUTE AND EVALUATE TEMPERATURE, RELATIVE HUMIDITY, AND ALTITUDE FROM DROPSONDE DATA	100
I292 PREFLIGHT DROPSONDE INSTRUMENTS	100
I289 PERFORM DROPS OF INSTRUMENTS	100
I286 LOAD DROPSONDE	100
I293 TURN-IN DROPSONDES	100
I283 BRIEF AIRCRAFT PASSENGERS	100
I290 PERFORM POSTFLIGHT ROUTINES	92
I285 COMPUTE DROP ALTITUDE	67
E160 ENCODE MESSAGES	50
D105 CONDUCT OJT	50



# APPENDIX B BACKGROUND AND JOB SATISFACTION DATA FOR CLUSTERS AND JOB TYPES

## SELECTED BACKGROUND DATA FOR THE WEATHER FORECASTER CLUSTER

	WEATHER FORECASTERS	WEATHER SUPERVISORS	DETACHMENT FORECASTERS	UNIT STAFF WEATHER BRIEFERS	WEATHER INFORMATION FORECASTERS
NUMBER IN GROUP	570	139	372	18	24
PERCENT OF SAMPLE	30%	7%	19%	1%	1%
PERCENT LOCATED OVERSEAS	27%	25%	26%	50%	25%

## DAFSC DISTRIBUTION

25130	0%	0%	0%	0%	0%
25150	2%	1%	2%	0%	8%
25150A	8%	0%	11%	0%	17%
25170	79%	61%	84%	100%	75%
25190	10%	33%	2%	0%	0%
CEM CODE 25100	1%	5%	0%	0%	0%
NOT REPORTED	0%	0%	1%	0%	0%

AVERAGE GRADE	5.7	6.8	5.3	5.6	5.2
AVERAGE MONTHS IN CAREER FIELD	128	198	104	130	103
AVERAGE MONTHS IN SERVICE	158	221	136	149	135
PERCENT IN FIRST ENLISTMENT	2%	1%	2%	0%	4%

AVERAGE NUMBER SUPERVISED	2	6	1	1	0
AVERAGE NUMBER OF TASKS PERFORMED	131	196	116	102	42

**JOB SATISFACTION INDICES FOR THE WEATHER FORECASTER CLUSTER**  
(PERCENT MEMBERS RESPONDING)

	WEATHER FORECASTERS	WEATHER SUPERVISORS	DETACHMENT FORECASTERS	UNIT STAFF WEATHER BRIEFERS	WEATHER INFORMATION FORECASTERS
<u>I FIND MY JOB:</u>					
NOT REPORTED	5	6	4	0	8
DULL	8	7	7	0	21
SO-SO	9	7	9	11	21
INTERESTING	78	80	80	89	50
<u>MY JOB UTILIZES MY TALENTS:</u>					
NOT REPORTED	1	1	2	0	0
LITTLE OR NOT AT ALL	12	5	12	11	33
FAIRLY WELL TO VERY WELL	67	58	71	67	67
EXCELLENTLY TO PERFECTLY	20	36	15	22	0
<u>MY JOB UTILIZES MY TRAINING:</u>					
NOT REPORTED	2	2	2	0	0
LITTLE OR NOT AT ALL	9	8	7	11	21
FAIRLY WELL TO VERY WELL	70	59	75	61	79
EXCELLENTLY TO PERFECTLY	19	31	16	28	0
<u>I PLAN TO REENLIST:</u>					
NOT REPORTED	3	3	3	6	4
NO OR PROBABLY NO	37	41	34	16	71
YES OR PROBABLY YES	60	56	63	78	25



## SELECTED BACKGROUND DATA FOR THE AFGWC FORECASTER CLUSTER

	AFGWC FORECASTERS	SEVERE WEATHER ANALYSTS	TERMINAL AERODROME FORECASTERS	WEATHER CENTRAL FORECASTERS	CHART FABRICATION PERSONNEL
NUMBER IN GROUP	70	18	29	11	11
PERCENT OF SAMPLE	4%	*	1%	*	*
PERCENT LOCATED OVERSEAS	11%	0%	10%	46%	0%
DAFSC DISTRIBUTION					
25130	0%	0%	0%	0%	0%
25150	0%	0%	0%	0%	0%
25150A	10%	17%	10%	0%	9%
25170	86%	78%	86%	100%	82%
25190	4%	5%	4%	0%	9%
CEM CODE 25100	0%	0%	0%	0%	0%
NOT REPORTED	0%	0%	0%	0%	0%
AVERAGE GRADE					
AVERAGE MONTHS IN CAREER FIELD	5.3	5.4	5.0	5.3	5.7
AVERAGE MONTHS IN SERVICE	101	102	94	106	108
PERCENT IN FIRST ENLISTMENT	133	136	121	136	153
	3%	6%	0%	0%	9%
AVERAGE NUMBER SUPERVISED					
AVERAGE NUMBER OF TASKS PERFORMED	0	0	0	0	2
	40	39	40	45	41

\* LESS THAN ONE PERCENT

JOB SATISFACTION INDICES FOR THE AFGWC FORECASTER CLUSTER  
(PERCENT MEMBERS RESPONDING)

	AFGWC FORECASTERS	SEVERE WEATHER ANALYSTS	TERMINAL AERODROME FORECASTERS	WEATHER CENTRAL FORECASTERS	CHART FABRICATION PERSONNEL
<u>I FIND MY JOB:</u>					
NOT REPORTED	3	0	0	18	0
DULL	8	0	7	18	18
SO-SO	6	6	3	18	0
INTERESTING	83	94	90	46	82
<u>MY JOB UTILIZES MY TALENTS:</u>					
NOT REPORTED	3	6	0	9	0
LITTLE OR NOT AT ALL	14	6	7	27	36
FAIRLY WELL TO VERY WELL	69	55	83	64	55
EXCELLENTLY TO PERFECTLY	14	33	10	0	9
<u>MY JOB UTILIZES MY TRAINING:</u>					
NOT REPORTED	3	0	3	9	0
LITTLE OR NOT AT ALL	13	11	7	9	36
FAIRLY WELL TO VERY WELL	61	45	69	73	55
EXCELLENTLY TO PERFECTLY	23	44	21	9	9
<u>I PLAN TO REENLIST:</u>					
NOT REPORTED	0	0	0	0	0
NO OR PROBABLY NO	43	67	38	36	27
YES OR PROBABLY YES	57	33	62	64	73

# SELECTED BACKGROUND DATA FOR THE WEATHER OBSERVER CLUSTER

B5

	WEATHER OBSERVERS	SENIOR WEATHER OBSERVERS	WEATHER STATION OBSERVERS	ORGANIC WEATHER TEAM MEMBERS	RANGE OBSERVERS
NUMBER IN GROUP	766	34	674	16	14
PERCENT OF SAMPLE	40%	2%	36%	*	*
PERCENT LOCATED OVERSEAS	23%	15%	22%	94%	29%

## DAFSC DISTRIBUTION

25130	12%	6%	13%	0%	22%
25150	84%	79%	84%	94%	78%
25150A	1%	0%	1%	0%	0%
25170	1%	9%	0%	0%	0%
25190	0%	3%	0%	0%	0%
CEM CODE 25100	0%	0%	0%	6%	0%
NOT REPORTED	2%	3%	2%	0%	0%

AVERAGE GRADE	3.8	4.7	3.8	3.8	3.2
AVERAGE MONTHS IN CAREER FIELD	33	68	31	41	32
AVERAGE MONTHS IN SERVICE	50	81	48	48	38
PERCENT IN FIRST ENLISTMENT	65%	27%	67%	69%	79%

AVERAGE NUMBER SUPERVISED	0	3	0	0	0
AVERAGE NUMBER OF TASKS PERFORMED	84	137	83	57	64

\* LESS THAN ONE PERCENT



**JOB SATISFACTION INDICES FOR THE WEATHER OBSERVER CLUSTER  
(PERCENT MEMBERS RESPONDING)**

	<u>WEATHER OBSERVERS</u>	<u>SENIOR WEATHER OBSERVERS</u>	<u>WEATHER STATION OBSERVERS</u>	<u>ORGANIC WEATHER TEAM MEMBERS</u>	<u>RANGE OBSERVERS</u>
<b><u>I FIND MY JOB:</u></b>					
NOT REPORTED	3	3	3	0	0
DULL	18	15	18	44	7
SO-SO	14	15	14	12	7
INTERESTING	65	67	65	44	86
<b><u>MY JOB UTILIZES MY TALENTS:</u></b>					
NOT REPORTED	1	0	2	0	0
LITTLE OR NOT AT ALL	29	18	29	31	29
FAIRLY WELL TO VERY WELL	64	73	64	69	64
EXCELLENTLY TO PERFECTLY	6	9	5	0	7
<b><u>MY JOB UTILIZES MY TRAINING:</u></b>					
NOT REPORTED	2	0	2	0	0
LITTLE OR NOT AT ALL	12	3	11	19	21
FAIRLY WELL TO VERY WELL	71	82	72	62	72
EXCELLENTLY TO PERFECTLY	15	15	15	19	7
<b><u>I PLAN TO REENLIST:</u></b>					
NOT REPORTED	4	6	4	0	7
NO OR PROBABLY NO	55	44	56	75	50
YES OR PROBABLY YES	41	50	40	25	43

## SELECTED BACKGROUND DATA FOR THE FORECASTER SUPPORT PERSONNEL CLUSTER

	FORECASTER SUPPORT PERSONNEL	UNIT SUPPORT PERSONNEL	RADAR SUPPORT OBSERVERS	AFGWC SUPPORT PERSONNEL
NUMBER IN GROUP	99	46	16	18
PERCENT OF SAMPLE	5%	2%	*	*
PERCENT LOCATED OVERSEAS	26%	20%	25%	0%
DAFSC DISTRIBUTION				
25130	7%	4%	6%	22%
25150	93%	96%	94%	78%
25150A	0%	0%	0%	0%
25170	0%	0%	0%	0%
25190	0%	0%	0%	0%
CEM CODE 25100	0%	0%	0%	0%
NOT REPORTED	0%	0%	0%	0%
AVERAGE GRADE	3.8	3.7	3.9	3.8
AVERAGE MONTHS IN CAREER FIELD	34	32	35	30
AVERAGE MONTHS IN SERVICE	44	39	49	54
PERCENT IN FIRST ENLISTMENT	71%	83%	56%	61%
AVERAGE NUMBER SUPERVISED	1	0	0	0
AVERAGE NUMBER OF TASKS PERFORMED	32	36	44	15

\* LESS THAN ONE PERCENT

JOB SATISFACTION INDICES FOR THE FORECASTER SUPPORT PERSONNEL CLUSTER  
(PERCENT MEMBERS RESPONDING)

	FORECASTER SUPPORT PERSONNEL	UNIT SUPPORT PERSONNEL	RADAR SUPPORT PERSONNEL	AFGWC SUPPORT PERSONNEL
<u>I FIND MY JOB:</u>				
NOT REPORTED	3	4	0	6
DULL	52	56	50	33
SO-SO	17	20	6	17
INTERESTING	28	20	44	44
<u>MY JOB UTILIZES MY TALENTS:</u>				
NOT REPORTED	2	4	0	0
LITTLE OR NOT AT ALL	73	76	69	61
FAIRLY WELL TO VERY WELL	23	20	25	39
EXCELLENTLY TO PERFECTLY	2	0	6	0
<u>MY JOB UTILIZES MY TRAINING:</u>				
NOT REPORTED	0	0	0	0
LITTLE OR NOT AT ALL	77	83	56	72
FAIRLY WELL TO VERY WELL	23	17	44	28
EXCELLENTLY TO PERFECTLY	0	0	0	0
<u>I PLAN TO REENLIST:</u>				
NOT REPORTED	3	4	0	0
NO OR PROBABLY NO	65	72	69	56
YES OR PROBABLY YES	32	24	31	44



## SELECTED BACKGROUND DATA FOR THE WEATHER MANAGER CLUSTER

	WEATHER MANAGERS	TECHNICAL ADVISORS	WEATHER STATION MANAGERS	DETACHMENT COMMANDERS	WEATHER OPERATIONS SUPERINTENDENTS
NUMBER IN GROUP	72	13	12	9	12
PERCENT OF SAMPLE	4%	*	*	*	*
PERCENT LOCATED OVERSEAS	33%	15%	50%	22%	33%
DAFSC DISTRIBUTION					
25130	0%	0%	0%	0%	0%
25150	4%	15%	0%	0%	0%
25150A	0%	0%	0%	0%	0%
25170	43%	69%	33%	11%	25%
25190	35%	8%	67%	22%	50%
CEM CODE 25100	17%	8%	0%	67%	25%
NOT REPORTED	1%	0%	0%	0%	0%
AVERAGE GRADE	7.2	6.8	7.2	8.3	7.8
AVERAGE MONTHS IN CAREER FIELD	220	186	235	263	224
AVERAGE MONTHS IN SERVICE	233	211	247	270	226
PERCENT IN FIRST ENLISTMENT	0%	0%	0%	0%	0%
AVERAGE NUMBER SUPERVISED	4	2	10	5	0
AVERAGE NUMBER OF TASKS PERFORMED	66	93	81	79	39
* LESS THAN ONE PERCENT					

**JOB SATISFACTION INDICES FOR THE WEATHER MANAGER CLUSTER**  
(PERCENT MEMBERS RESPONDING)

	<u>WEATHER MANAGERS</u>	<u>TECHNICAL ADVISORS</u>	<u>WEATHER STATION MANAGERS</u>	<u>DETACHMENT COMMANDERS</u>	<u>WEATHER OPERATIONS SUPERINTENDENTS</u>
<b><u>I FIND MY JOB:</u></b>					
NOT REPORTED	5	0	0	22	8
DULL	6	0	8	11	0
SO-SO	7	0	0	0	0
INTERESTING	82	100	92	67	92
<b><u>MY JOB UTILIZES MY TALENTS:</u></b>					
NOT REPORTED	3	0	0	22	0
LITTLE OR NOT AT ALL	14	8	0	11	0
FAIRLY WELL TO VERY WELL	55	54	67	11	67
EXCELLENTLY TO PERFECTLY	28	38	33	56	33
<b><u>MY JOB UTILIZES MY TRAINING:</u></b>					
NOT REPORTED	3	0	0	22	0
LITTLE OR NOT AT ALL	29	23	0	22	42
FAIRLY WELL TO VERY WELL	46	54	58	33	33
EXCELLENTLY TO PERFECTLY	22	23	42	23	25
<b><u>I PLAN TO REENLIST:</u></b>					
NOT REPORTED	4	8	0	22	0
NO OR PROBABLY NO	38	23	42	22	25
YES OR PROBABLY YES	58	69	58	56	75

# SELECTED BACKGROUND DATA FOR THE SOLAR FORECASTER CLUSTER

B11

	SOLAR FORECASTERS	ASTROGEOPHYSICAL RADIO DATA ANALYSTS	SPACE ENVIRONMENTAL FORECASTERS	SOLAR ASTROGEOPHYSICAL OBSERVERS
NUMBER IN GROUP	23	5	5	9
PERCENT OF SAMPLE	1%	*	*	*
PERCENT LOCATED OVERSEAS	44%	40%	0%	56%

## DAFSC DISTRIBUTION

25130	0%	0%	0%	0%
25150	4%	0%	0%	0%
25150A	9%	0%	20%	11%
25170	70%	80%	60%	67%
25190	17%	20%	20%	22%
CEM CODE 25100	0%	0%	0%	0%
NOT REPORTED	0%	0%	0%	0%

AVERAGE GRADE	5.9	6.0	5.6	6.2
AVERAGE MONTHS IN CAREER FIELD	170	161	158	189
AVERAGE MONTHS IN SERVICE	177	164	170	192
PERCENT IN FIRST ENLISTMENT	0%	0%	0%	0%

AVERAGE NUMBER SUPERVISED	1	1	0	1
AVERAGE NUMBER OF TASKS PERFORMED	41	46	43	49

\* LESS THAN ONE PERCENT



**JOB SATISFACTION INDICES FOR THE SOLAR FORECASTER CLUSTER**  
(PERCENT MEMBERS RESPONDING)

	SOLAR FORECASTERS	ASTROGEOPHYSICAL RADIO DATA ANALYSTS	SPACE ENVIRONMENTAL FORECASTERS	SOLAR ASTROGEOPHYSICAL OBSERVERS
<b>I FIND MY JOB:</b>				
NOT REPORTED	9	0	0	22
DULL	13	20	0	11
SO-SO	0	0	0	0
INTERESTING	78	80	100	67
<b>MY JOB UTILIZES MY TALENTS:</b>				
NOT REPORTED	4	0	0	11
LITTLE OR NOT AT ALL	26	40	0	11
FAIRLY WELL TO VERY WELL	52	40	60	67
EXCELLENTLY TO PERFECTLY	18	20	40	11
<b>MY JOB UTILIZES MY TRAINING:</b>				
NOT REPORTED	5	0	0	12
LITTLE OR NOT AT ALL	65	100	40	44
FAIRLY WELL TO VERY WELL	17	0	40	22
EXCELLENTLY TO PERFECTLY	13	0	20	22
<b>I PLAN TO REENLIST:</b>				
NOT REPORTED	0	0	0	0
NO OR PROBABLY NO	39	20	0	67
YES OR PROBABLY YES	61	80	100	33

SELECTED BACKGROUND DATA FOR THE COMPUTER PROGRAMMING AND PROCESSING PERSONNEL CLUSTER

B13

	COMPUTER PROGRAMMING AND PROCESSING PERSONNEL	AUTOMATED SYSTEMS ANALYSTS	CENTER DATA BASE MONITORS
NUMBER IN GROUP	61	44	5
PERCENT OF SAMPLE	3%	2%	*
PERCENT LOCATED OVERSEAS	7%	9%	100%

DAFSC DISTRIBUTION			
25130	0%	0%	0%
25150	23%	23%	20%
25150A	8%	7%	40%
25170	61%	61%	40%
25190	8%	9%	0%
CEM CODE 25100	0%	0%	0%
NOT REPORTED	0%	0%	0%

AVERAGE GRADE	5.1	5.0	4.0
AVERAGE MONTHS IN CAREER FIELD	116	117	70
AVERAGE MONTHS IN SERVICE	129	126	74
PERCENT IN FIRST ENLISTMENT	26%	27%	40%

AVERAGE NUMBER SUPERVISED	0	0	0
AVERAGE NUMBER OF TASKS PERFORMED	34	34	24

\* LESS THAN ONE PERCENT

JOB SATISFACTION INDICES FOR THE COMPUTER PROGRAMMING AND PROCESSING PERSONNEL CLUSTER  
(PERCENT MEMBERS RESPONDING)

	COMPUTER PROGRAMMING AND PROCESSING PERSONNEL	AUTOMATED SYSTEMS ANALYSTS	CENTER DATA BASE MONITORS
<u>I FIND MY JOB:</u>			
NOT REPORTED	5	7	0
DULL	5	2	20
SO-SO	5	2	60
INTERESTING	85	89	60
<u>MY JOB UTILIZES MY TALENTS:</u>			
NOT REPORTED	0	0	0
LITTLE OR NOT AT ALL	15	7	60
FAIRLY WELL TO VERY WELL	51	52	40
EXCELLENTLY TO PERFECTLY	34	41	0
<u>MY JOB UTILIZES MY TRAINING:</u>			
NOT REPORTED	0	0	0
LITTLE OR NOT AT ALL	67	66	80
FAIRLY WELL TO VERY WELL	25	25	20
EXCELLENTLY TO PERFECTLY	8	9	0
<u>I PLAN TO REENLIST:</u>			
NOT REPORTED	0	0	0
NO OR PROBABLY NO	57	52	60
YES OR PROBABLY YES	43	48	40



TASK	PERCENT MEMBERS PERFORMING
4.1.1 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	88
4.1.2 REPEAT TELETYPE PAGE	88
4.1.3 DETERMINE PREVAILING VISIBILITY VALUES	88
4.1.4 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	88
4.1.5 DETERMINE TRIM OR MAGNETIC WIND DIRECTION	88
4.1.6 DETERMINE EXISTENCE AND AMOUNT OF OBSERVATION	88
4.1.7 DETERMINE STATION PRESSURE	88
4.1.8 DETERMINE DEW POINT	88
4.1.9 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS REPORT	88
4.1.10 DETERMINE AIRSPEED SETTINGS	88
4.1.11 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	88
4.1.12 FILE TELETYPE MESSAGE	88
4.1.13 TRANSMIT FROM FACSIMILE MACHINE	88
4.1.14 CORRECT AND RE-TRANSMIT	88
4.1.15 TRANSMIT DATA TO RADIO	88
4.1.16 PREPARE METEOROLOGICAL OBSERVATION (AND) REQUEST	88
4.1.17 CHANGE FROM WIND DIRECTION	88
4.1.18 TRANSMIT DATA	88
4.1.19 REPEAT TELETYPE MESSAGE	88

## APPENDIX C

### REPRESENTATIVE TASKS PERFORMED BY DAFSC GROUPS

TASK	PERCENT MEMBERS PERFORMING
4.1.1 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	88
4.1.2 REPEAT TELETYPE PAGE	88
4.1.3 DETERMINE PREVAILING VISIBILITY VALUES	88
4.1.4 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	88
4.1.5 DETERMINE TRIM OR MAGNETIC WIND DIRECTION	88
4.1.6 DETERMINE EXISTENCE AND AMOUNT OF OBSERVATION	88
4.1.7 DETERMINE STATION PRESSURE	88
4.1.8 DETERMINE DEW POINT	88
4.1.9 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS REPORT	88
4.1.10 DETERMINE AIRSPEED SETTINGS	88
4.1.11 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	88
4.1.12 FILE TELETYPE MESSAGE	88
4.1.13 TRANSMIT FROM FACSIMILE MACHINE	88
4.1.14 CORRECT AND RE-TRANSMIT	88
4.1.15 TRANSMIT DATA TO RADIO	88
4.1.16 PREPARE METEOROLOGICAL OBSERVATION (AND) REQUEST	88
4.1.17 CHANGE FROM WIND DIRECTION	88
4.1.18 TRANSMIT DATA	88
4.1.19 REPEAT TELETYPE MESSAGE	88

# REPRESENTATIVE TASKS PERFORMED BY DAFSC 25130 PERSONNEL (N=107)

TASK	PERCENT MEMBERS PERFORMING
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	88
F222 REPLACE TELETYPE PAPER	86
E154 DETERMINE PREVAILING VISIBILITY VALUES	86
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	86
E157 DETERMINE TRUE OR MAGNETIC WIND DIRECTION	86
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	86
E156 DETERMINE STATION PRESSURE	86
E137 BRIEF RELIEF OBSERVERS	86
E150 DETERMINE DEW POINT	86
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	85
E146 DETERMINE ALTIMETER SETTINGS	85
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	85
E166 FILE TELETYPE MESSAGES	84
E198 TEAR MAPS FROM FACSIMILE PRINTER	83
E141 COMPLETE AWS FORM 10	83
E164 FILE PLOTTED MAPS OR CHARTS	83
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	82
F208 CHANGE PRINTER RIBBONS	81
Q519 PLOT SKEW T CHARTS	79
E135 ANNOTATE RECORDING INSTRUMENT CHARTS	79

# REPRESENTATIVE TASKS PERFORMED BY DAFSC 25150 PERSONNEL\* (N=889)

TASK	PERCENT MEMBERS PERFORMING
E137 BRIEF RELIEF OBSERVERS	82
F222 REPLACE TELETYPE PAPER	81
F208 CHANGE PRINTER RIBBONS	81
E166 FILE TELETYPE MESSAGES	80
E133 ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	77
E180 PREPARE AUTOMATIC RESPONSE QUERIE (ARQ) REQUESTS	76
E198 TEAR MAPS FROM FACSIMILE PRINTER	75
F210 CHECK ACCURACY OF CLOCK	75
E164 FILE PLOTTED MAPS OR CHARTS	75
F218 REPLACE FACSIMILE PAPER	75
E150 DETERMINE DEW POINT	74
E149 DETERMINE CLOUD LAYER TO BE CONSIDERED CEILING	74
E158 DETERMINE TYPE, CHARACTER, AND INTENSITY OF PRECIPITATION	74
E151 DETERMINE EXISTENCE AND AMOUNT OF OBSCURATION	74
E152 DETERMINE EXTENT AND NUMBER OF CLOUD LAYERS ALOFT	73
E160 ENCODE MESSAGES	71
E187 READ DRY AND WET BULB TEMPERATURES	70
Q519 PLOT SKEW T CHARTS	69
F224 REPLACE WIND RECORDER CHARTS	68

\* EXCLUDES A-SHRED PERSONNEL

# REPRESENTATIVE TASKS PERFORMED BY DAFSC 25150A PERSONNEL (N=71)

TASK	PERCENT MEMBERS PERFORMING
N436 ISSUE WEATHER FORECASTS	70
N421 AMEND WEATHER FORECASTS	70
L344 ANALYZE UPPER AIR CHARTS	68
N427 DECODE WEATHER FORECASTS	66
N429 ENCODE WEATHER FORECASTS	66
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	63
L338 ANALYZE SKEW T LOG P CHARTS	63
L323 ANALYZE FACSIMILE PRODUCTS	61
N432 ISSUE LOCAL WEATHER WARNINGS	61
N420 AMEND OR CANCEL LOCAL WEATHER WARNINGS	61
N457 PREPARE SHORT RANGE WEATHER FORECASTS	59
L341 ANALYZE SYNOPTIC SURFACE CHARTS	59
L345 ANALYZE UPPER LEVEL WINDS	59
N422 BRIEF AIR CREWS	58
L330 ANALYZE LOCAL AREA CHARTS	58
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	58

# REPRESENTATIVE TASKS PERFORMED BY DAFSC 25170 PERSONNEL (N=675)

TASK	PERCENT MEMBERS PERFORMING
L330 ANALYZE LOCAL AREA CHARTS	75
L323 ANALYZE FACSIMILE PRODUCTS	75
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	73
N427 DECODE WEATHER FORECASTS	72
L344 ANALYZE UPPER AIR CHARTS	72
N421 AMEND WEATHER FORECASTS	71
N436 ISSUE WEATHER FORECASTS	71
N429 ENCODE WEATHER FORECASTS	71
L338 ANALYZE SKEW T LOG P CHARTS	71
Q499 EXTRACT INFORMATION FROM SUNSET (SS), SUNRISE (SR), MOONRISE (MR), AND MOONSET (MS) TABLES	68
N420 AMEND OR CANCEL LOCAL WEATHER WARNINGS	67
Q529 PREPARE "BUST REVIEWS"	67
L341 ANALYZE SYNOPTIC SURFACE CHARTS	66
N432 ISSUE LOCAL WEATHER WARNINGS	65
N457 PREPARE SHORT RANGE WEATHER FORECASTS	64
N422 BRIEF AIR CREWS	64
N464 RECORD OR TRANSMIT PILOT REPORTS	63
N454 PREPARE MET WATCH ADVISORIES	62
N450 PREPARE BRIEFING CHARTS	62



# REPRESENTATIVE TASKS PERFORMED BY DAFSC 25190 PERSONNEL (N=106)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	81
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	80
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	77
C97 PREPARE APRs	75
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	73
D123 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	73
B33 ATTEND CONFERENCES OR POLICY MEETINGS	72
A10 DEVELOP WORK METHODS OR PROCEDURES	72
A7 DETERMINE WORK PRIORITIES	72
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	68
B40 DIRECT COMPLIANCE WITH OPERATIONAL DIRECTIVES	67
D109 COUNSEL TRAINEES ON TRAINING PROGRESS	65
B74 SUPERVISE WEATHER TECHNICIANS (AFSC 25170)	64
N429 ENCODE WEATHER FORECASTS	62
L323 ANALYZE FACSIMILE PRODUCTS	61
N427 DECODE WEATHER FORECASTS	60
L356 LOCATE METEOROLOGICAL FEATURES ON CHARTS	59
N457 PREPARE SHORT RANGE WEATHER FORECASTS	58
N436 ISSUE WEATHER FORECASTS	58
A11 DEVELOP WORKING AGREEMENTS WITH USING, MAINTENANCE, OR COMMUNICATIONS ORGANIZATIONS	58

## REPRESENTATIVE TASKS PERFORMED BY CEM CODE 25100 PERSONNEL (N=27)

TASK	PERCENT MEMBERS PERFORMING
B75 WRITE CORRESPONDENCE	96
B33 ATTEND CONFERENCES OR POLICY MEETINGS	89
C101 WRITE STAFF STUDIES, SURVEYS, OR SPECIAL REPORTS	85
A14 ESTABLISH ORGANIZATIONAL POLICIES, OFFICE INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	85
A4 DETERMINE PUBLICATION REQUIREMENTS	81
B37 COUNSEL PERSONNEL ON PERSONAL OR MILITARY RELATED PROBLEMS	78
B56 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	74
B40 DIRECT COMPLIANCE WITH OPERATIONAL DIRECTIVES	70
A5 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT OR SUPPLIES	70
A7 DETERMINE WORK PRIORITIES	70
C83 EVALUATE JOB DESCRIPTIONS	67
A10 DEVELOP WORK METHODS OR PROCEDURES	63
B34 CONDUCT CAREER COUNSELING FOR SUBORDINATES	63
C97 PREPARE APRs	63
C79 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	59
C77 EVALUATE BUDGET OR FINANCIAL REQUIREMENTS	59
C82 EVALUATE INSPECTION REPORTS OR PROCEDURES	59
C86 EVALUATE OPERATING REPORTS	59
C94 EVALUATE WORK SCHEDULES	59
A27 PLAN WORK ASSIGNMENTS	59